clarion

Clarion Co., Ltd.
50 Kamitoda, Toda-shi, Saitama 335-8511 Japan
Service Dept.: 5-66 Azuma , Kitamoto-shi, Saitama 364-0007 Japan
Tel: +81-48-541-2335 / 2432 FAX: +81-48-541-2703

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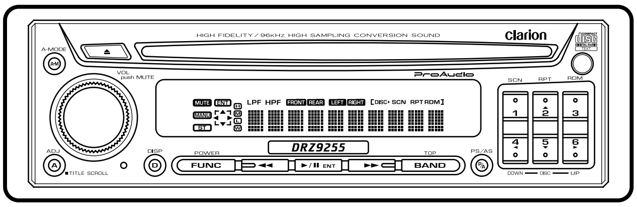
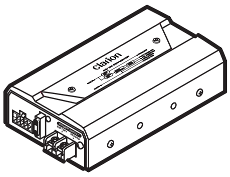
Service Manual

CeNET



(DRZ9255)



High-Fidelity AM/FM CD Player

Model ***DRZ9255***
(PE-2628B-A / For U.S.A.)

Model ***HX-D2***
(PE-2628K-A / For other countries)

SPECIFICATIONS

FM tuner section

Frequency range:	87.9MHz to 107.9MHz(U.S.A.) 87.0MHz to 108.0MHz(OTHERS)
Usable sensitivity:	9dBf
50dB quieting sensitivity:	15dBf
Alternate channel selectivity:	70dB
Stereo separation:	35dB (1kHz)
Frequency response:	30Hz to 15kHz (+/-3dB)

AM tuner section

Frequency range:	530kHz to 1710kHz(U.S.A.) 531kHz to 1629kHz(OTHERS)
Usable sensitivity:	25uV

CD player section

System:	Compact disc digital audio system
Usable discs:	Compact disc
Frequency response:	5Hz to 20kHz (+/-1dB)
S/N ratio:	112dB (1kHz)
Dynamic range:	100dB (1kHz)
Distortion:	0.003%(20Hz to 20kHz)

Audio section

Bass control action:	+/-12dB (50Hz)
Treble control action:	+/-12dB (10kHz)
Line output level:	Vol.0dB=4V Vol.+6dB=8V(Max) (CD 1kHz)

DSP/DAC

A/D conversion:	24-bit 64x oversampling ΔΣ A/D converter
D/A conversion:	96kHz/24-bit advanced segment D/A converter
8x oversampling digital filter	
Blocked band attenuation:	-130 dB
Transmitted band attenuation:	+/-0.00001dB
Sampling rate converter	
Input sampling rate:	fs32k, fs44.1k, fs48k,fs96k
Output sampling rate:	fs48k, fs96k
DSP:	24-bit audio DSP, 34-bit arithmetic operation (overflow margin 4-bit)

General

Power supply voltage:	14.4V DC(10.8V to 15.6V allowable) negative ground
Current consumption:	Less than 5A
Dimensions(mm)	
Source unit:	178(W)x50(H)x155(D)
DC-DC converter:	163(W)x42(H)x98(D)
Remote control unit:	52(W)x125(H)x12(D)
Weight	
Source unit:	1.8kg
DC-DC converter:	700g
Remote control unit:	50g(including battery)

NOTES

* Use only compact discs bearing the COMPACT disc DIGITAL AUDIO or COMPACT disc DIGITAL AUDIO TEXT mark.Do not play heart-shaped, octagonal, or other specially shaped compact discs.
Some CDs recorded in CD-R/CD-RW mode may not be usable.

* We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.

* Specifications and design are subject to change without notice for further improvement.

COMPONENTS

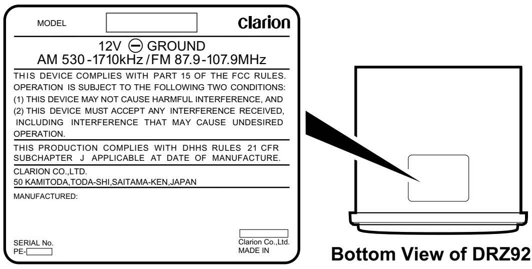
PE-2628B-A,PE-2628K-A

1.	Main unit	-----------	1
2.	DC-DC converter	EE-1236B-A	1
3.	Rmote controller	RCB-169-600	1
4.	Battery(CR2025)	-----------	1
5.	Strap	300-4976-00	1
6.	Universal MTG-bracket	300-9035-01	1
7.	Outer escutcheon	370-6116-00	1
8.	16-Pin extension lead(1.5m)	854-6428-00	1
	(Fuse 3A	120-0030-00	1)
9.	Memory B/U lead(YEL:3.5m)	854-6423-01	1
	(Fuse 10A	060-0057-56	1)
10.	Ground lead(BLK:1.5m)	854-6424-01	1
11.	Parts bag for DC-DC converter	-----------	1
11-1.	Mounting bracket	300-7362-02	2
11-2.	Terminal cover	345-7403-00	1
11-3.	Tapping screw	700-5016-89	4
11-4.	Machine screw(M5x8)	714-4008-89	4
11-5.	Plate nut	725-0216-00	4
12.	Parts bag for source unit	-----------	1
12-1.	Hook plate	330-8216-03	2
12-2.	Lead holder	335-0833-03	1
12-3.	Hexagonal screw(M5x8)	716-0496-01	1

CAUTIONS

Use of controls, adjustment or performance of procedures other than those specified herein, may result in hazardous radiation exposure.

The COMPACT DISC player should not be adjusted or repaired by anyone except properly qualified service personnel.



MODEL

Clarion

12V ⊖ GROUND

AM 530-1710kHz/FM 87.9-107.9MHz

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

THIS PRODUCTION COMPLIES WITH DHHS RULES 21 CFR SUBCHAPTER J APPLICABLE AT DATE OF MANUFACTURE.

CLARION CO.,LTD.
50 KAMITODA,TODA-SHI,SAITAMA-KEN,JAPAN

MANUFACTURED:

SERIAL No.
PE-

Clarion Co.,Ltd.
MADE IN

Bottom View of DRZ9255

To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.
   The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.
   The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.
2. Place the parts and wiring back in their original positions after replacement or re-wiring.
   For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.
   If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.
3. Check for safety after repair.
   Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary ploblems around the repaired spots.
   If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
4. Caution in removal and making wiring connection to the parts for the automobile.
   Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
5. Cautions regarding chips.
   Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.
6. Cautions in handling flexible PWB
   Before working with a soldering iron, make sure that the iron tip temperature is around 270℃. Take care not to apply the iron tip repeatedly(more than three times)to the same patterns. Also take care not to apply the tip with force.
7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.
8. Cautions in checking that the optical pickup lights up.
   The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.
9. Cautions in handling the optical pickup
   The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.

9-1. Laser diode
The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.

9-2. Actuator
The actuator has a powerful magnetic circuit. If a magnetic material is put close to it. Its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

9-3. Cleaning the lens
Dust on the optical lens affects performance. To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

SYSTEM CHECK

The first time this unit is turned on after the wire connections are completed, it must be checked what equipment is connected. When the power is turned on, “SYSTEM CHK” and “Push POWER” appear in the display alternately, so press the [FUNC] button. The system check starts within the unit. When the system check is complete, press the [FUNC] button again.

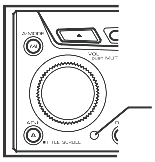
Digital wiring

When the optical digital cable is connected to or disconnected from this set later, press the function button while holding down direct buttons [1] and [6] with the power OFF to perform a system check.
Though pressing the reset button also performs a system check, the contents of memory will be erased completely in this case.

ERROR DISPLAYS

If an error occurs, one of the following displays is displayed.
Take the measures described below to eliminate the problem.

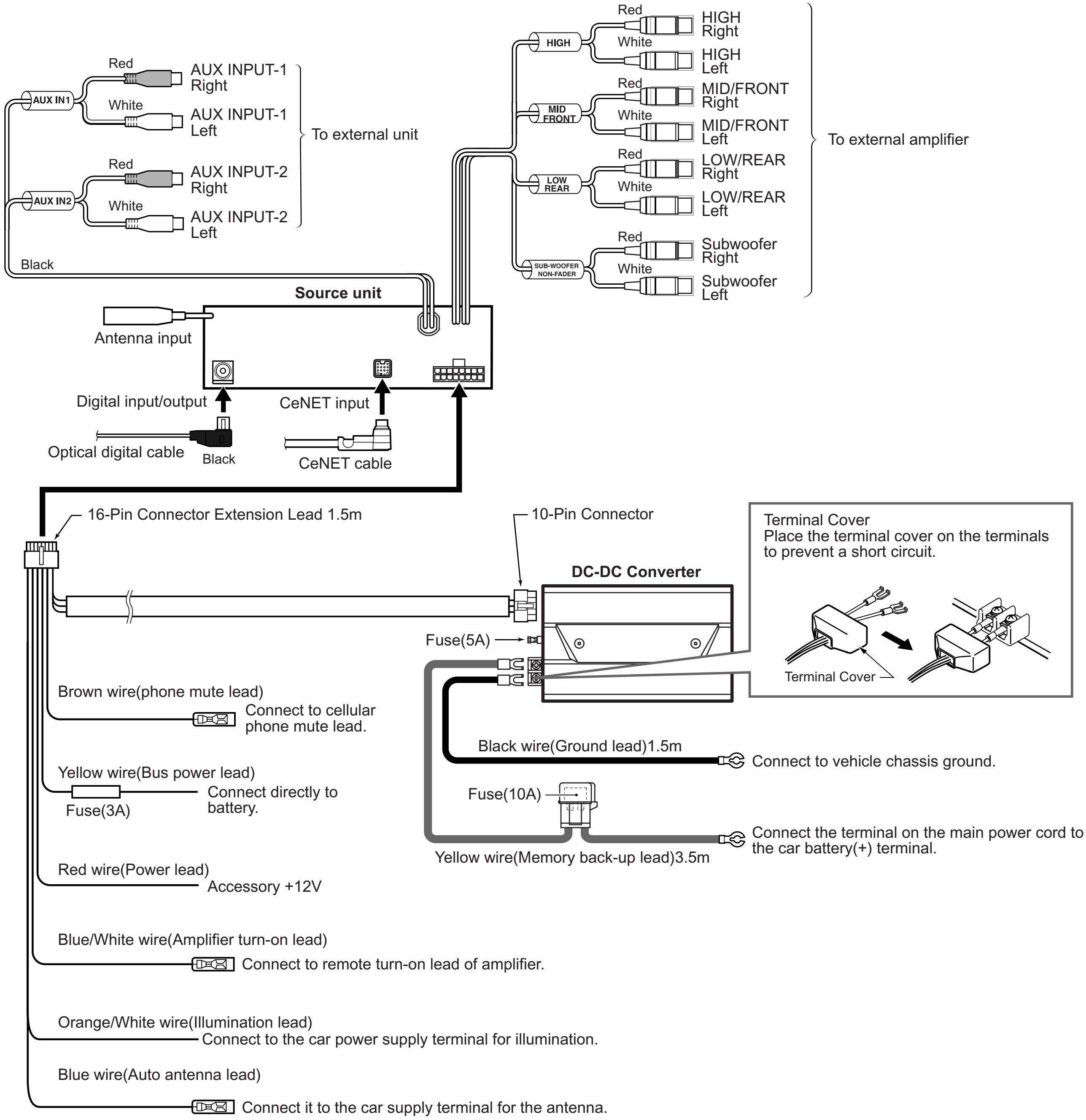
	Error Display	Cause	Measure
CD	**ERROR 2**	A CD is caught inside the CD deck and is not ejected.	This is a failure of CD deck's mechanism.
	ERROR 3	A CD cannot be played due to scratches,etc.	Replace with a non-scratched,non-warped-disc.
CD changer	**ERROR 2**	A CD inside the CD changer is not loaded.	This is a failure of CD changer's mechanism.
	ERROR 3	A CD inside the CD changer cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped disc.
	ERROR 6	A CD inside the CD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
DVD changer	**ERROR 2**	A DISC inside the DVD changer cannot be played.	This is a failure of DVD mechanism.
	ERROR 3	A DISC cannot be played due to scratches,etc.	Retry or replace with a non-scratched, non-warped-disc.
	ERROR 6	A DISC inside the DVD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
	ERROR P	Parental level error	Set the correct Parental level.
	ERROR R	Region code error	Eject the disc and replace correct region code disc.



If an error display other than the ones described above appears, press the reset button.

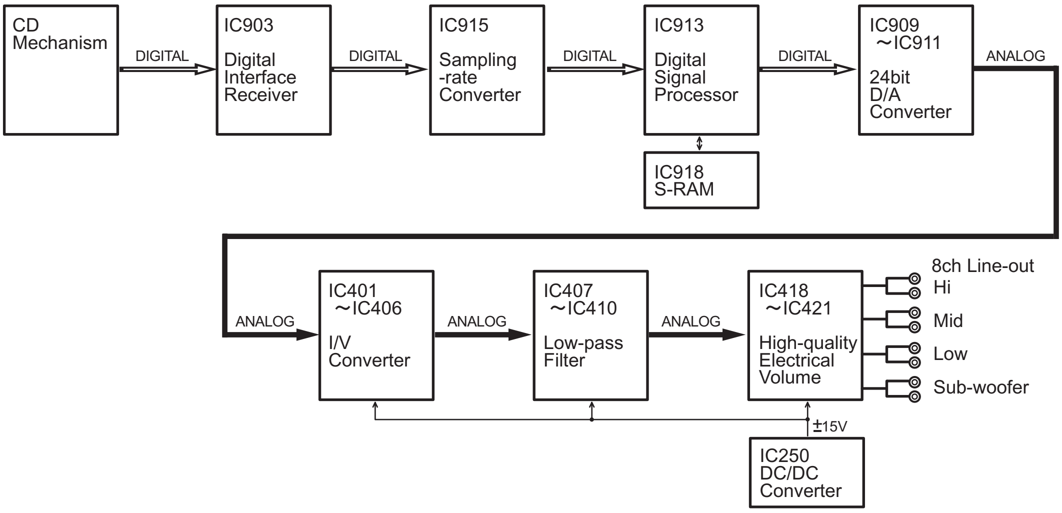
Reset button

WIRE CONNECTIONS


Red
AUX IN1
AUX INPUT-1 Right
White
AUX INPUT-1 Left
Red
AUX IN2
AUX INPUT-2 Right
White
AUX INPUT-2 Left
To external unit
Black
HIGH
Red
HIGH Right
White
HIGH Left
MID FRONT
Red
MID/FRONT Right
White
MID/FRONT Left
LOW REAR
Red
LOW/REAR Right
White
LOW/REAR Left
SUB-WOOFER NON-FADER
Red
Subwoofer Right
White
Subwoofer Left
To external amplifier
Source unit
Antenna input
Digital input/output
CeNET input
Optical digital cable
Black
CeNET cable
16-Pin Connector Extension Lead 1.5m
10-Pin Connector
DC-DC Converter
Terminal Cover
Place the terminal cover on the terminals to prevent a short circuit.
Terminal Cover
Fuse(5A)
Brown wire(phone mute lead)
Connect to cellular phone mute lead.
Black wire(Ground lead)1.5m
Connect to vehicle chassis ground.
Yellow wire(Bus power lead)
Connect directly to battery.
Fuse(3A)
Fuse(10A)
Connect the terminal on the main power cord to the car battery(+) terminal.
Yellow wire(Memory back-up lead)3.5m
Red wire(Power lead)
Accessory +12V
Blue/White wire(Amplifier turn-on lead)
Connect to remote turn-on lead of amplifier.
Orange/White wire(Illumination lead)
Connect to the car power supply terminal for illumination.
Blue wire(Auto antenna lead)
Connect it to the car supply terminal for the antenna.

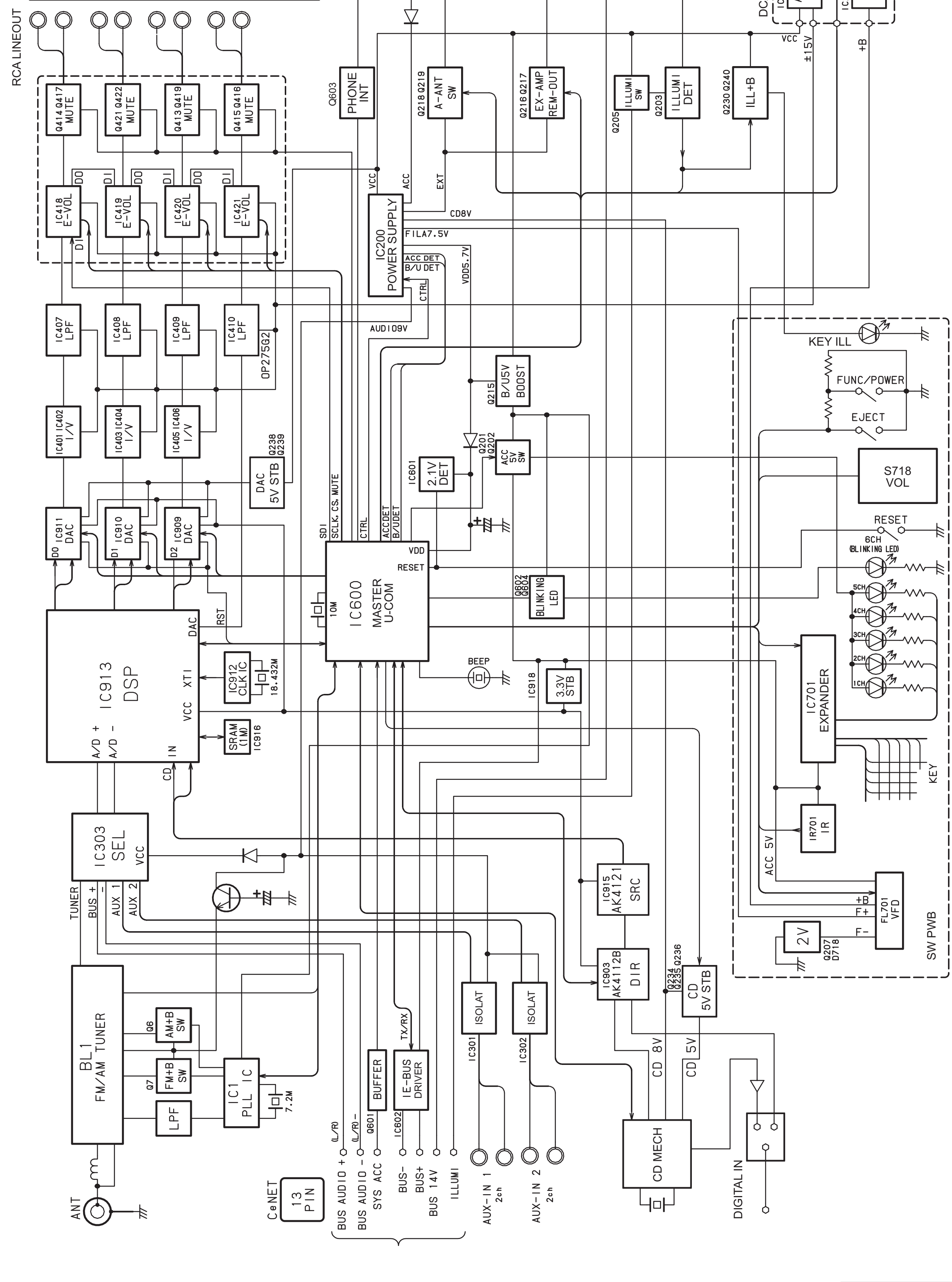
BLOCK DIAGRAM

Audio line sction


CD Mechanism
DIGITAL
IC903 Digital Interface Receiver
DIGITAL
IC915 Sampling -rate Converter
DIGITAL
IC913 Digital Signal Processor
DIGITAL
IC909 ～IC911 24bit D/A Converter
ANALOG
IC918 S-RAM
ANALOG
IC401 ～IC406 I/V Converter
ANALOG
IC407 ～IC410 Low-pass Filter
ANALOG
IC418 ～IC421 High-quality Electrical Volume
8ch Line-out
Hi
Mid
Low
Sub-woofer
±15V
IC250 DC/DC Converter

System section

MULTI	STD	DRCT
HI	HI-FRONT	—
MID	LOW-FRONT	FRONT
LOW	REAR	REAR
SUB-WOOF	SUB-WOOF	NON-FADER


RCA LINEOUT
Q414 Q417 MUTE
Q421 Q422 MUTE
Q413 Q419 MUTE
Q415 Q416 MUTE
IC418 E-VOL
IC419 E-VOL
IC420 E-VOL
IC421 E-VOL
DO
DI
IC407 LPF
IC408 LPF
IC409 LPF
IC410 LPF
OP275G2
IC401 IC402 I/V
IC403 IC404 I/V
IC405 IC406 I/V
DAC 5V STB
Q238 Q239
IC911 DAC
IC910 DAC
IC909 DAC
D0
D1
D2
IC913 DSP
DAC
RST
XTI
VCC
A/D +
A/D -
IN
CD
IC912 CLK IC
18.432M
SRAM (1M)
IC916
IC303 SEL
VCC
TUNER
BUS +
AUX 1
AUX 2
BL1 FM/AM TUNER
Q6 AM+B SW
Q7 FM+B SW
LPF
IC1 PLL IC
7.2M
ANT
CeNET 13 PIN
BUS AUDIO + (L/R)
BUS AUDIO - (L/R)
SYS ACC
BUS-
BUS+
BUS 14V
ILLUMI
Q601 BUFFER
IC602 IE-BUS DRIVER
TX/RX
IC301 ISOLAT
IC302 ISOLAT
AUX-IN 1 2ch
AUX-IN 2 2ch
PHONE INT
ACC
POWER ANT
AMP REM
BUS14V
ILLUMI
B/U 14V
DC/DC PWB
IC250 AUDIO D/D
IC202 VFD D/D
VCC
±15V
+B
Q603 PHONE INT
Q218 Q219 A-ANT SW
Q216 Q217 EX-AMP REM-OUT
Q205 ILLUMI SW
Q203 ILLUMI DET
Q230 Q240 ILL+B
VCC
ACC
EXT
IC200 POWER SUPPLY
CD8V
FILA7.5V
VDD5.7V
ACC DET
B/U DET
CTRL
AUDIO9V
SDI
SCLK, CS, MUTE
CTRL
ACCDET
B/UDET
VDD
RESET
IC600 MASTER U-COM
10M
Q215 B/U5V BOOST
Q201 Q202 ACC 5V SW
IC601 2.1V DET
BEEP
IC918 3.3V STB
Q602 Q604 BLINKING LED
IC915 AK4121 SRC
IC903 AK4112B DIR
Q234 Q235 Q236 CD 5V STB
CD 8V
CD 5V
CD MECH
DIGITAL IN
KEY ILL
FUNC/POWER
EJECT
S718 VOL
RESET
6CH (BLINKING LED)
5CH
4CH
3CH
2CH
1CH
IC701 EXPANDER
KEY
IR701 IR
ACC 5V
FL701 VFD
+B
F+
F-
2V
Q207 D718
SW PWB

EXPLANATION OF IC

052-3393-00 M30622MEP-161GP System Controller

Terminal Description

pin 1: CD SBSY :IN: The sub Q data request command input from the CD IC.
pin 2: TIME BASE :IN: Time base pulse input.
pin 3: DSP RDY :IN: Ready signal input from the DSP IC.
pin 4: NU : - : Not in use.
pin 5: REMOCON :IN: Remote controller signal input terminal.
pin 6: BYTE :IN: The data length selection(8bit/16bit).
pin 7: CN VSS :IN: Connect to VSS.
pin 8: INIT 1 :IN: Destination setting input. Refer Table 1.
pin 9: INIT 2 :IN: Destination setting input. Refer Table 1.
pin 10: RESET :IN: Reset signal input.
pin 11: X out : O : Crystal connection.
pin 12: VSS : - : Negative voltage supply.
pin 13: X IN :IN: Crystal connection.
pin 14: VCC : - : Positive voltage supply.
pin 15: NU : - : Not in use.
pin 16: ACC DET :IN: ACC detection signal input.
pin 17: BU DET :IN: Backup detection signal input.
pin 18: KEY INT :IN: Key interrupting signal input.
pin 19: 27pinConnect :IN: Connect to pin 27.
pin 20: VFD BLANK : O : Blank pulse output to the VFD driver.
pin 21: BUS IN/out : O : The audio signal control for Ce-NET.
pin 22: BEEP : O : Beep out.
pin 23: E VOL CS : O : The chip select signal output to Electric Volume IC.
pin 24: E VOL SD : O : The serial data output to Electric Volume IC.
pin 25: E VOL SCLK : O : The serial clock output to Electric Volume IC.
pin 26: CLK REF : O : Reference clock pulse output.
pin 27: IE BUS RX :IN: IE Bus serial data input.
pin 28: IE BUS TX : O : IE Bus serial data output.
pin 29: EMULATOR TX : O : The serial data output to the emulator.
pin 30: EMULATOR RX :IN: The serial data input from the emulator.
pin 31: CONNECT G : - : Connect to the ground.
pin 32: NU : - : Not in use.
pin 33: VFD SO : O : The serial data output to the VFD driver.
pin 34: NU : - : Not in use.
pin 35: VFD CLK : O : The clock pulse output to the VFD driver.
pin 36: VFD LAT : O : The latch strove signal output to the VFD driver.
pin 37: JOG CW :IN: Jog key signal input.
pin 38: JOG CCW :IN: Jog key signal input.
pin 39: CONNECT G : - : Connect to the ground.
pin 40: CATS LED : O : CATS LED drive output.
pin 41: KEY Set : O : Set signal output to the key scan IC.
pin 42: KEY CHIP SEL : O : The chip select signal output to the key scan IC.
pin 43: KEY CLK : O : The clock pulse output for the key scan IC.
pin 44: CONNECT G : - : Connect to the ground.
pin 45: KEY DI :IN: Key scan data input.
pin 46: KEY DO : O : The serial data output to the Key scan IC.
pin 47: LD MUTE : O : Muting signal output to the CD mechanism.
pin 48: LD CONT : O : The laser diode control signal output.
pin 49: CD TR A :IN: The photo sensor signal input from the CD mechanism.
pin 50: CD TR B :IN: The photo sensor signal input from the CD mechanism.
pin 51: CD CHK SW :IN: CD disc chucking signal input.
pin 52: CD SSTOP :IN: At loading, detects the chucking. And next, detects the inside limit of the pick up position.
pin 53: CD RESET : O : The reset pulse output to the CD IC.
pin 54: CD CCE : O : The chip enable signal output to the CD IC.
pin 55: CD BU CK : O : CD IC clock pulse output.
pin 56: CD BUS 3 :I/O: The data bus.
pin 57: CD BUS 2 :I/O: The data bus.
pin 58: CD BUS 1 :I/O: The data bus.
pin 59: CD BUS 0 :I/O: The data bus.
pin 60: VCC : - : Positive voltage supply.
pin 61: CD 5V : O : 5V power supply ON signal output for CD.
pin 62: VSS : - : Negative voltage supply.
pin 63: REG CTRL : O : Power supply IC control signal output.
pin 64: 5V REM : O : 5V power supply ON signal output.
pin 65: PLL SI :IN: Serial data input from the PLL IC.
pin 66: PLL SO : O : Serial data output to the PLL IC.
pin 67: PLL SCK : O : The clock pulse output to the PLL IC.
pin 68: PLL CE : O : The chip enable signal output to the PLL IC.
pin 69: ST SD :IN: At receiving the FM station, this port detects the stereo signal. At seeking or scanning, this port detects the station detection signal.
pin 70: VFD DD ON : O : VFD DD converter ON signal output.
pin 71: ILL DET :IN: Illumination ON signal input.
pin 72: DIR ERF :IN: Unlock & Parity error flag input from the DIR IC.
pin 73: PHONE INT :IN: The telephone interrupt signal input.
pin 74: AUTO ANT : O : Motor antenna control signal output.
pin 75: AMP REM : O : Standby signal output to Audio power amplifier.
pin 76: DIG In/Out sel : O : Digital input/output selection.
pin 77: SYS MUTE : O : System muting signal output.
pin 78: PRE MUTE : O : Pre-mute signal output.
pin 79: SEL CLK : O : The serial clock output to the audio selector IC.
pin 80: SEL DATA : O : The serial data output to the audio selector IC.
pin 81: KEY ILL REM : O : Key illumination ON signal output.
pin 82: DAC MC : O : Clock pulse output to the DAC.
pin 83: DAC MD : O : Serial command data output to the DAC.
pin 84: DAC MS : O : Chip select output to the DAC.
pin 85: DIR PDN : O : The power down signal output to the DIR IC.
pin 86: PCM DET :IN: Non-PCM detection signal input.
pin 87: DIR CDT O : O : The control data output to the DIR IC.
pin 88: DIR CCLK : O : The control clock output to the DIR IC.
pin 89: DIR CSN : O : The chip select output to the DIR IC.
pin 90: DSP INIT RST : O : The reset signal output to DSP IC.
pin 91: DSP RST : O : Reset pulse output to the DSP IC.
pin 92: SYS ACC : O : ACC detect signal output.
pin 93: DSP REQ : O : Request signal output to DSP IC.
pin 94: A VSS : - : Negative voltage supply for analog section.
pin 95: KEY AD :IN: Input terminal of A/D converter for Key judgment.
pin 96: Vref : - : Reference voltage.
pin 97: A VCC : - : Positive voltage supply for the internal analog section.
pin 98: DSP SI :IN: Serial data input from the DSP IC.
pin 99: DSP SO : O : Serial data output to the DSP IC.
pin100: DSP SCK : O : The clock pulse output to DSP IC.

Table 1. Destination setting

	Japan	Noth America	Asia
INIT 1 (pin 8)	H	H	L
INIT 2 (pin 9)	H	L	L

051-6705-00 AK7720A Audio DSP with 2ch ADC and 6ch DAC

Terminal Description

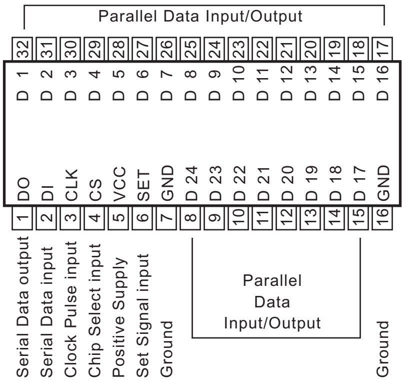
pin 1:	LFLT	IN	The capacitor and the resistor connection terminal for PLL.
pin 2:	A VSS	-	Analog ground.
pin 3:	A VDD	-	Positive supply voltage for the Analog section.
pin 4:	INIT RESET	IN	The initial reset input.
pin 5:	CODEC RESET	IN	The CODEC reset input.
pin 6:	DSP RESET	IN	DSP reset input.
pin 7:	S MUTE	IN	The soft muting command input.
pin 8:	B VSS	-	Ground for the bus interface section.
pin 9:	PLL	IN	Open or Connect to DVSS usually.
pin 10:	CKS	IN	The clock pulse selection.
pin 11:	S Data in A	IN	DSP serial data input. Open or connect to DVSS usually.
pin 12:	S Data in 1	IN	DSP serial data input.
pin 13:	S Data in 2	IN	DSP serial data input.
pin 14:	S Data out 1	O	DSP serial data output.
pin 15:	S Data out 2	O	DSP serial data output.
pin 16:	S Data out 3/AD	O	DSP/ADC serial data output.
pin 17:	S D OUT	O	The serial data output.
pin 18:	LR CK I/O	I/O	SMODE(pin20) = L : 1fs clock input. SMODE(pin20) = H : 1fs clock output.
pin 19:	BIT CLK	I/O	SMODE(pin20) = L : 64fs clock input. SMODE(pin20) = H : 64fs clock output.
pin 20:	S MODE	IN	Slave master selection.
pin 21:	Clock Out	O	Clock Out.
pin 22:	D VSS	-	Digital ground.
pin 23:	D VDD	-	Positive supply voltage for the digital section.
pin 24:	XT I	IN	Oscillation terminal.
pin 25:	XT O	O	Oscillation terminal.
pin 26:	JX	IN	External jumping signal input.
pin 27:	RQ	IN	The request signal input from the master side.
pin 28:	S CLK	IN	Sift clock input.
pin 29:	SI	IN	Serial data input.
pin 30:	SO	O	Serial data output.
pin 31:	Write Ready	O	Write ready flag output.
pin 32:	Data Ready	O	Data output ready flag output.
pin 33:	CAS	O	The column address strobe output to DRAM.
pin 34:	RAS	O	The row address strobe output to DRAM.
pin 35:	WRITE ENBL	O	The write enable signal output.
pin 36:	D VDD	-	Positive supply voltage for the digital section.
pin 37:	D VSS	-	Digital ground.
pin 38:	A 0	O	Address signal output.
pin 39:	A 1	O	Address signal output.
pin 40:	A 2	O	Address signal output.
pin 41:	A 3	O	Address signal output.
pin 42:	A 4	O	Address signal output.
pin 43:	A 5	O	Address signal output.
pin 44:	A 6	O	Address signal output.
pin 45:	A 7	O	Address signal output.
pin 46:	A 8	O	Address signal output.
pin 47:	A 9	O	Address signal output.
pin 48:	A 10	O	Address output to the external DRAM.
pin 49:	A 11	O	Address output to the external DRAM.
pin 50:	A 12	O	Address signal output.
pin 51:	A 13	O	Address signal output.
pin 52:	A 14	O	Address signal output.
pin 53:	A 15	O	Address signal output.
pin 54:	A 16	O	Address signal output.
pin 55:	D VDD	-	Positive supply voltage for the digital section.
pin 56:	D VSS	-	Digital ground.
pin 57:	OUT ENABLE	O	The output enable command output.
pin 58:	I/O 0	I/O	Data input/output.
pin 59:	I/O 1	I/O	Data input/output.
pin 60:	I/O 2	I/O	Data input/output.
pin 61:	I/O 3	I/O	Data input/output.
pin 62:	I/O 4	I/O	Data input/output.
pin 63:	I/O 5	I/O	Data input/output.
pin 64:	I/O 6	I/O	Data input/output.
pin 65:	I/O 7	I/O	Data input/output.
pin 66:	D VDD	-	Positive supply voltage for the digital section.
pin 67:	D VSS	-	Digital ground.
pin 68:	TEST	-	For the Test.
pin 69:	TEST	-	For the Test.
pin 70:	B VSS	-	Ground.
pin 71:	A OUT 3 R-	O	Inverted Right channel audio signal output of DAC-3.
pin 72:	A OUT 3 R+	O	Non-inverted Right channel audio signal output of DAC-3.
pin 73:	NU	-	Not in use.
pin 74:	A OUT 3 L-	O	Inverted Left channel audio signal output of DAC-3.
pin 75:	A OUT 3 L+	O	Non-inverted Left channel audio signal output of DAC-3.
pin 76:	A OUT 2 R-	O	Inverted Right channel audio signal output of DAC-2.
pin 77:	A OUT 2 R+	O	Non-inverted Right channel audio signal output of DAC-2.
pin 78:	NU	-	Not in use.
pin 79:	A OUT 2 L-	O	Inverted Left channel audio signal output of DAC-2.
pin 80:	A OUT 2 L+	O	Non-inverted Left channel audio signal output of DAC-2.
pin 81:	NU	-	Not in use.
pin 82:	A OUT 1 R-	O	Inverted Right channel audio signal output of DAC-1.
pin 83:	A OUT 1 R+	O	Non-inverted Right channel audio signal output of DAC-1.
pin 84:	NU	-	Not in use.
pin 85:	A OUT 1 L-	O	Inverted Left channel audio signal output of DAC-1.
pin 86:	A OUT 1 L+	O	Non-inverted Left channel audio signal output of DAC-1.
pin 87:	Vr DAC Low	IN	The reference voltage input.
pin 88:	A VSS	-	Analog ground.
pin 89:	A VSS	-	Analog ground.
pin 90:	A VDD	-	Positive supply voltage for the Analog section.
pin 91:	Vr DAC High	IN	The reference voltage input.
pin 92:	NU	-	Not in use.
pin 93:	Vr ADC Low	IN	The reference voltage input.
pin 94:	A VSS	-	Analog ground.
pin 95:	A VDD	-	Positive supply voltage for the Analog section.
pin 96:	Vr ADC High	IN	The reference voltage input.
pin 97:	A IN R-	IN	Inverted Right channel audio signal input.
pin 98:	A IN R+	IN	Non-inverted Right channel audio signal input.
pin 99:	A IN L-	IN	Inverted Left channel audio signal input.
pin100:	A IN L+	IN	Non-inverted Left channel audio signal input.

051-6399-00 TC94A15F CD IC

Terminal Description

pin 1:	IPF OUT	: O :	IP flag output.
pin 2:	SB OK O	: O :	Sub code Q data CRCC OK signal output.
pin 3:	CLOCKIO	:I/O:	The clock pulse input/output for the sub code reading.
pin 4:	VDD	: - :	Positive supply voltage.
pin 5:	VSS	: - :	Negative supply voltage.
pin 6:	DATA	: O :	DATA
pin 7:	SF SY O	: O :	Playback frame synchronous signal output.
pin 8:	SB SY O	: O :	Sub code block synchronous signal output.
pin 9:	HSO	: O :	The play speed flag output.
pin 10:	UHSO	: O :	The play speed flag output.
pin 11:	AR SEL IN	: IN :	Fix to the high level.
pin 12:	AWRC	: O :	The control signal output for the active wide range VCO.
pin 13:	P VDD	: - :	PLL positive supply voltage.
pin 14:	PDO	: O :	Phase difference signal output of EFM-PLCK.
pin 15:	TMAX S	: O :	T max judgment output.
pin 16:	TMAX	: O :	T max judgment output.
pin 17:	LPF N	: IN :	Inverted input of LPF for PLL.
pin 18:	LPF OUT	: O :	The output terminal for the Low Pass Filter.
pin 19:	P Vref	: - :	PLL reference voltage.
pin 20:	VCO FILTER	: O :	Loop filter for VCO.
pin 21:	VCO Ref	: IN :	VCO reference voltage input.
pin 22:	DTC N	: O :	For the analog slicer.
pin 23:	DTC P	: O :	For the analog slicer.
pin 24:	PLL VSS	: - :	PLL ground.
pin 25:	SLCO	: O :	Output of internal DAC for data slice level generation.
pin 26:	RF IN	: IN :	RF signal input.
pin 27:	RF RP	: IN :	RF ripple input.
pin 28:	RF EQ OUT	: O :	The output of the RF equalizer.
pin 29:	A VDD	: - :	Positive supply voltage for the Analog section.
pin 30:	RES IN	: - :	For reference current setting.
pin 31:	Vref OUT	: O :	The reference voltage output.
pin 32:	VMDIR	: O :	The reference voltage output.
pin 33:	TESTR	: O :	The compensation terminal for RFEQO offset.
pin 34:	INVSEL	: IN :	MDI polarity selection.
pin 35:	AGCI	: IN :	The input terminal of RF AGC amplifier.
pin 36:	RF DCI	: IN :	The input terminal for RF peak detection.
pin 37:	RF OUT	: O :	RF signal output.
pin 38:	PN SEL	: IN :	The transistor type selection input for laser diode driver. L=NPN, H=PNP.
pin 39:	EQ SET	: O :	The equalizer setting terminal.
pin 40:	RF VDD	: - :	RF power supply.
pin 41:	LDO	: O :	The laser diode drive output.
pin 42:	MDI	: IN :	Monitor photo diode signal input.
pin 43:	RF VSS	: - :	RF ground.
pin 44:	FNI 2	: IN :	Main beam signal input.
pin 45:	FNI 1	: IN :	Main beam signal input.
pin 46:	FPI 2	: IN :	Main beam signal input.
pin 47:	FPI 1	: IN :	Main beam signal input.
pin 48:	TPI	: IN :	Sub beam signal input.
pin 49:	TNI	: IN :	Sub beam signal input.
pin 50:	FTEO	: O :	For test.
pin 51:	RF ZI	: IN :	RF ripple zero cross signal input.
pin 52:	A VSS	: - :	Analog ground.
pin 53:	RF RP	: O :	RF ripple signal output.
pin 54:	RF DC	: O :	RF peak detection signal output. (hologram suitable)
pin 55:	FEI	: O :	Focus error signal output.
pin 56:	SBAD	: O :	Sub beam add signal output.
pin 57:	TEI	: O :	Tracking error signal output.
pin 58:	TE Z IN	: IN :	Tracking error signal inpur for zero cross.
pin 59:	A VDD	: - :	Positive supply voltage for the Analog section.
pin 60:	FOO	: O :	Focus equalizer output.
pin 61:	TRO	: O :	Tracking equalizer output.
pin 62:	Vref	: O :	Reference voltage output.
pin 63:	FMO	: O :	Field equalizer output / Speed error output.
pin 64:	DMO	: O :	Disk equalizer output.
pin 65:	IO2A	:I/O:	General input/output.
pin 66:	IO3A	:I/O:	General input/output.
pin 67:	MONIT	: O :	Internal DSP signal monitor.
pin 68:	FG IN	: IN :	FG input for the spindle CAV servo.
pin 69:	VSS	: - :	Negative supply voltage.
pin 70:	VDD	: - :	Positive supply voltage.
pin 71:	TESIN	: IN :	For test.
pin 72:	X VSS	: - :	Master clock analog ground.
pin 73:	X IN	: IN :	Crystal connection.
pin 74:	X O	: O :	Crystal connection.
pin 75:	X VDD	: - :	Clock power supply.
pin 76:	D VSS	: - :	Digital ground.
pin 77:	RO	: O :	Right channel data output for 1-bit DAC.
pin 78:	D VDD	: - :	Positive supply voltage for the digital section.
pin 79:	D Vref	: O :	Digital reference voltage.
pin 80:	LO	: O :	Left channel data output for 1-bit DAC.
pin 81:	D VSS	: - :	Digital ground.
pin 82:	Z DET O	: O :	1bit DAC zero flag output.
pin 83:	VSS	: - :	Negative supply voltage.
pin 84:	BUS 0	:I/O:	CD IC Data input / output.
pin 85:	BUS 1	:I/O:	CD IC Data input / output.
pin 86:	BUS 2	:I/O:	CD IC Data input / output.
pin 87:	BUS 3	:I/O:	CD IC Data input / output.
pin 88:	BU CK IN	: IN :	CD IC Data clock input.
pin 89:	CCEI	: IN :	Chip enable input.
pin 90:	RSTI	: IN :	Reset signal input.
pin 91:	VDD	: - :	Positive supply voltage.
pin 92:	EMPHI/FAO	:I/O:	Emphasis input for 1-bit DAC / Flag A output.
pin 93:	BCKI/FBO	:I/O:	Bit clock input for 1-bit DAC / Flag B output.
pin 94:	AIN/FCO	:I/O:	Audio input for 1-bit DAC / Flag C output.
pin 95:	LRCKI/FDO	:I/O:	LR clock input for 1-bit DAC / Flag D output.
pin 96:	EMPHO	: O :	Emphasis flag output. H=Emphasis ON.
pin 97:	B CK O	: O :	Bit clock output.
pin 98:	A OUT	: O :	Audio signal output.
pin 99:	LR CK O	: O :	LR clock output.
pin100:	D OUT	: O :	Serial data output.

051-6643-90 M66010GP 24-bit I/O Expander



051-6373-18 AK4112BVF Digital Interface Receiver

Terminal Description

pin			
pin 1:	D VDD	: - :	Positive voltage supply for the digital section.
pin 2:	D VSS	: - :	Digital ground.
pin 3:	T VDD	: - :	Positive voltage supply for output-buffer.
pin 4:	VALIDITY	: O :	Validity flag output in the parallel mode.
	: TX	: O :	Transmit channel (through data) output in serial mode.
pin 5:	XT I	: IN :	Oscillation terminal.
pin 6:	XT O	: O :	Oscillation terminal.
pin 7:	PDN	: IN :	Power down & reset signal input.
pin 8:	RESIST	: - :	The resistor connection.
pin 9:	A VDD	: - :	Positive voltage supply for analog section.
pin 10:	A VSS	: - :	Negative voltage supply for analog section.
pin 11:	RX 1	: IN :	The receiver channel 1 in serial mode.
pin 12:	DIF 0	: IN :	The audio data format selection in parallel mode, refer Table 1.
	: RX 2	: IN :	The receiver channel 2 in serial mode.
pin 13:	DIF 1	: IN :	The audio data format selection in parallel mode, refer Table 1.
	: RX 3	: IN :	The receiver channel 3 in serial mode.
pin 14:	DIF 2	: IN :	The audio data format selection in parallel mode, refer Table 1.
	: RX 4	: IN :	The receiver channel 4 in serial mode.
pin 15:	PCM DET	: O :	Non-PCM detect. L = Non detect.
pin 16:	PARA/SERI	: IN :	Parallel("H")/Serial("L") mode select input.
pin 17:	FS96	: O :	96kHz Sampling detect. RX mode H : fs = 88.2kHz or more L : fs = 54kHz or less Xtal mode H : XFS96 = 1 L : XFS96 = 0
pin 18:	ERF	: O :	Unlock & Parity error output. L = No error.
pin 19:	LR CK I/O	:I/O:	Left/Right clock.
pin 20:	SDT O	: O :	The audio serial data output.
pin 21:	BI CK	:I/O:	Audio serial data clock.
pin 22:	D AUX	: IN :	Auxiliary audio serial data input.
pin 23:	MCK O 2	: O :	Master clock output, refer Table 2.
pin 24:	MCK O 1	: O :	Master clock output, refer Table 2.
pin 25:	OCK Sel 0	: IN :	Output clock select in parallel mode. refer Table 2.
	: CSN	: IN :	Chip select input in serial mode.
pin 26:	OCK Sel 1	: IN :	Output clock select in parallel mode. refer Table 2.
	: C CLK	: IN :	Control clock input in serial mode.
pin 27:	CM 1	: IN :	Master clock operation select input in parallel mode, refer Table 3.
	: CDTI	: IN :	Control data input in serial mode.
pin 28:	CM 0	: IN :	Master clock operation select input in parallel mode, refer Table 3.
	: CDTO	: O :	Control data output in serial mode.

Table 1. Audio data format

DIF 2 (pin 14)	DIF 1 (pin 13)	DIF 0 (pin 12)	D AUX (pin 22)	SDT O (pin 20)	LR CK (pin 19)	BI CK (pin 21)
0	0	0	24bit Left justified	16bit Right justified	H/L Output	64fs Output
0	0	1	24bit Left justified	18bit Right justified	H/L Output	64fs Output
0	1	0	24bit Left justified	20bit Right justified	H/L Output	64fs Output
0	1	1	24bit Left justified	24bit Right justified	H/L Output	64fs Output
1	0	0	24bit Left justified	24bit Left justified	H/L Output	64fs Output
1	0	1	24bit I2S	24bit I2S	L/H Output	64fs Output
1	1	0	24bit Left justified	24bit Left justified	H/L Intput	64-128fs Input
1	1	1	24bit I2S	24bit I2S	H/L Intput	64-128fs Input

Table 2. Master clock frequency select

OCK S 1 (pin 26)	OCK S 0 (pin 25)	MCK O 1 (pin 24)	MCK O 2 (pin 23)		X'tal	fs(kHz)
0	0	256fs	256fs		256fs	32.0 44.1 48.0 96.0
0	1	256fs	128fs		256fs	32.0 44.1 48.0 96.0
1	0	512fs	256fs		512fs	32.0 44.1 48.0
1	1	-	-	Test Mode	-	-

Table 3. Clock operation mode select

CM 1 (pin 27)	CM 0 (pin 28)	UNLOCK	PLL	X'tal	Clock source	FS96 (pin 17)	SDT O (pin 20)
0	0	x	ON	OFF	PLL	RFS96	RX
0	1	x	OFF	ON	X'tal	XFS96	D AUX
1	0	0	ON	ON	PLL	RFS96	RX
1	0	1	ON	ON	X'tal	XFS96	D AUX
1	1	x	ON	ON	X'tal	XFS96	D AUX

051-6708-90 AK4121VF Asynchronous Sample Rate Converter

Terminal Description

pin 1: FILT : O : PLL filter output.
pin 2: A VSS : - : Negative voltage supply for analog section.
pin 3: PDN : IN : Power down & reset signal input.
pin 4: S MUTE : IN : The soft muting command input.
pin 5: DEM 0 : IN : De-emphasis Frequency Selection.
pin 6: DEM 1 : IN : De-emphasis Frequency Selection.
pin 7: I LR CK : IN : Left/Right clock input for the input signal.
pin 8: I BI CK : IN : Bit clock input for the input signal.
pin 9: SDT I : IN : The serial data input.
pin 10: I DIF 0 : IN : Input data format select.
pin 11: I DIF 1 : IN : Input data format select.
pin 12: I DIF 2 : IN : Input data format select.
pin 13: C MODE 0 : IN : The clock mode select.
pin 14: C MODE 1 : IN : The clock mode select.
pin 15: C MODE 2 : IN : The clock mode select.
pin 16: O DIF 0 : IN : Output data format select.
pin 17: O DIF 1 : IN : Output data format select.
pin 18: SDT O : O : The audio serial data output.
pin 19: O BI CK : I/O : Bit clock input/output for the output signal.
pin 20: O LR CK : I/O : Left/Right clock input/output for the output signal.
pin 21: MASTER CLK : IN : Master clock input.
pin 22: T VDD : - : Positive voltage supply for output-buffer.
pin 23: D VSS : - : Digital ground.
pin 24: VDD : - : Positive voltage supply.

Table 1. Master/Slave control

Cmode 2 (pin 15)	Cmode 1 (pin 14)	Cmode 0 (pin 13)	Master CLK (pin 21)	Master/Slave (Output port)
L	L	L	256fso(fso to 96kHz)	Master
L	L	H	384fso(fso to 96kHz)	Master
L	H	L	512fso(fso to 48kHz)	Master
L	H	H	768fso(fso to 48kHz)	Master
H	L	L	Connect to DVSS	Slave
H	H	H	Connect to DVSS	Master(bypass mode)

Table 2. Input Audio data Formats

I DIF 2 (pin 12)	I DIF 1 (pin 11)	I DIF 0 (pin 10)	SDT I format (pin 9)	I BI CK (slave) (pin 8)
L	L	L	16bit LSB Justified	32 or less
L	L	H	20bit LSB Justified	40 or less
L	H	L	20bit MSB Justified	40 or less
L	H	H	20/16bit I2C compat.	32/40fs or less
H	L	L	24bit LSB Justified	48 or less

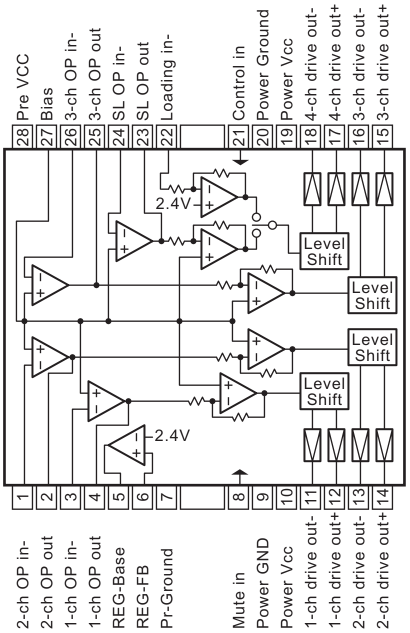
Table 3. Output Audio data Formats

O DIF 1 (pin 17)	O DIF 0 (pin 16)	SDT O format (pin 18)	O BI CK (Slave)	O BI CK (Master)
L	L	16bit LSB Justified	64fs	64fs
L	H	20bit LSB Justified	64fs	64fs
H	L	20/16bit MSB Justif.	32/40fs or less	64fs
H	H	20/16bit I2C compat.	32/40fs or less	64fs

Table 4. De-emphasis filter control

DEM 1 (pin 6)	DEM 0 (pin 5)	De-emphasis filter
L	L	44.1kHz
L	H	off
H	L	48.0kHz
L	H	32.0kHz

051-6071-08 BA5825FP-E2 Quad Motor Drivers

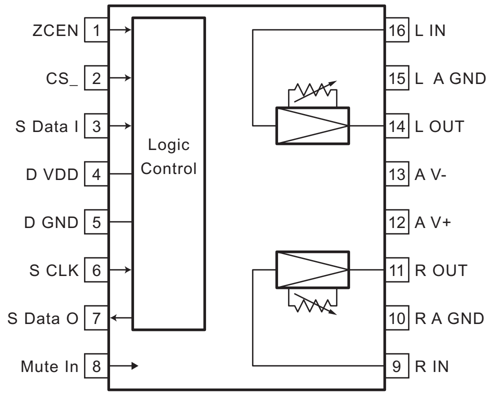


28 Pre VCC
27 Bias
26 3-ch OP in-
25 3-ch OP out
24 SL OP in-
23 SL OP out
22 Loading in-
21 Control in
20 Power Ground
19 Power Vcc
18 4-ch drive out-
17 4-ch drive out+
16 3-ch drive out-
15 3-ch drive out+
2.4V
Level Shift
Level Shift
Level Shift
Level Shift
2.4V
1 2-ch OP in-
2 2-ch OP out
3 1-ch OP in-
4 1-ch OP out
5 REG-Base
6 REG-FB
7 Pr-Ground
8 Mute in
9 Power GND
10 Power Vcc
11 1-ch drive out-
12 1-ch drive out+
13 2-ch drive out-
14 2-ch drive out+

Truth Table

MUTE (pin 9)	CNT (pin 21)	CH1,2,3 output	CH4 output
H	H	MUTE OFF	LD ON
H	L	MUTE OFF	SL ON
L	H	MUTE ON	LD ON
L	L	MUTE ON	MUTE ON

051-5036-90 PGA2310UA Stereo Volume Controller



ZCEN 1
CS_ 2
S Data I 3
D VDD 4
D GND 5
S CLK 6
S Data O 7
Mute In 8
Logic Control
16 L IN
15 L A GND
14 L OUT
13 A V-
12 A V+
11 R OUT
10 R A GND
9 R IN

Terminal Description

pin 1: ZCEN : IN : Zero Cross Enable signal input.
pin 2: CS IN : IN : The chip select command input.
pin 3: S DATA IN : IN : The serial data input.
pin 4: D VDD : - : Positive voltage supply for digital section.
pin 5: D GND : - : Digital ground.
pin 6: S CLK : IN : The serial clock input.
pin 7: S DATA OUT : O : The serial data output.
pin 8: MUTE IN : IN : Mute command input.
pin 9: R A IN : IN : Right channel audio signal input.
pin 10: R A GND : - : Right channel audio signal ground.
pin 11: R A OUT : O : Right channel audio signal output.
pin 12: A V+ : - : Positive voltage supply for analog section.
pin 13: A V- : - : Negative voltage supply for analog section.
pin 14: L A OUT : O : Left channel audio signal output.
pin 15: L A GND : - : Left channel audio signal ground.
pin 16: L A IN : IN : Left channel audio signal input.

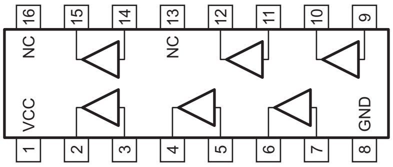
051-9126-00 BS62LV1024STI-70 128 x 8 bit SRAM

Terminal Description
pin 1: A 11 : IN : Address signal input.
pin 2: A 9 : IN : Address signal input.
pin 3: A 8 : IN : Address signal input.
pin 4: A 13 : IN : Address signal input.
pin 5: WE_ : IN : Write enable signal input.
pin 6: CE 2 : IN : The chip enable signal input.
pin 7: A 15 : IN : Address signal input.
pin 8: VCC : - : Positive voltage supply.
pin 9: NU : - : Not in use.
pin 10: A 16 : IN : Address signal input.
pin 11: A 14 : IN : Address signal input.
pin 12: A 12 : IN : Address signal input.
pin 13: A 7 : IN : Address signal input.
pin 14: A 6 : IN : Address signal input.
pin 15: A 5 : IN : Address signal input.
pin 16: A 4 : IN : Address signal input.
pin 17: A 3 : IN : Address signal input.
pin 18: A 2 : IN : Address signal input.
pin 19: A 1 : IN : Address signal input.
pin 20: A 0 : IN : Address signal input.
pin 21: D 0 : I/O : Data input/output.
pin 22: D 1 : I/O : Data input/output.
pin 23: D 2 : I/O : Data input/output.
pin 24: GND : - : Ground.
pin 25: D 3 : I/O : Data input/output.
pin 26: D 4 : I/O : Data input/output.
pin 27: D 5 : I/O : Data input/output.
pin 28: D 6 : I/O : Data input/output.
pin 29: D 7 : I/O : Data input/output.
pin 30: CE 1_ : IN : The chip enable signal input.
pin 31: A 10 : IN : Address signal input.
pin 32: OE_ : IN : Output enable signal input.

Truth Table

WE_ (pin 5)	CE 1_ (pin 30)	CE 2 (pin 6)	OE_ (pin 32)	I/O Operation
x	H	x	x	High Z
x	x	L	x	High Z
H	L	H	H	High Z
H	L	H	L	data out
L	L	H	x	data in

051-7285-08 CD74HC4050PWR Hex Buffer



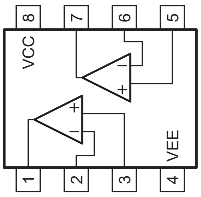
051-3232-90 uPD29M33T 3.3V Voltage Regulator

Terminal Description
pin 1: Input(power source)
pin 2: Ground
pin 3: Output

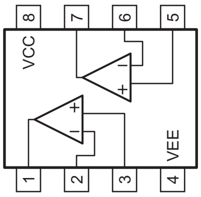
051-6709-90 PCM1792DBR 24bit 192kHz DA Converter

Terminal Description
pin 1: ZERO L : O : ZERO flag output for Left channel.
pin 2: ZERO R : O : ZERO flag output for Right channel.
pin 3: M SEL : IN : I2C/SPI_ select.
pin 4: LR CK IN : IN : Left/Right clock input.
pin 5: DATA IN : IN : Serial data input.
pin 6: B CK IN : IN : Bit clock input.
pin 7: SCK : IN : The system clock pulse input.
pin 8: D GND : - : Digital ground.
pin 9: D VDD : - : Positive voltage supply for the digital section.
pin 10: MS : IN : Chip select for mode control.
pin 11: MDI : IN : Mode control data input.
pin 12: MC : IN : Mode control clock input.
pin 13: MD : O : Mode control read back data output.
pin 14: RSTI : IN : Reset signal input.
pin 15: A VCC : - : Positive voltage supply for the internal analog section.
pin 16: A GND : - : Analog ground.
pin 17: I out R+ : O : Right channel analog signal current output +.
pin 18: I out R- : O : Right channel analog signal current output -.
pin 19: A GND : - : Analog ground.
pin 20: Iref : - : Output current bias.
pin 21: V com R : - : Right channel internal bias.
pin 22: V com L : - : Left channel internal bias.
pin 23: A VCC : - : Positive voltage supply for the internal analog section.
pin 24: A GND : - : Analog ground.
pin 25: I out L+ : O : Left channel analog signal current output +.
pin 26: I out L- : O : Left channel analog signal current output -.
pin 27: A GND : - : Analog ground.
pin 28: A VCC : - : Positive voltage supply for the internal analog section.

051-3042-90 OPA2134UA Dual Operational Amplifier

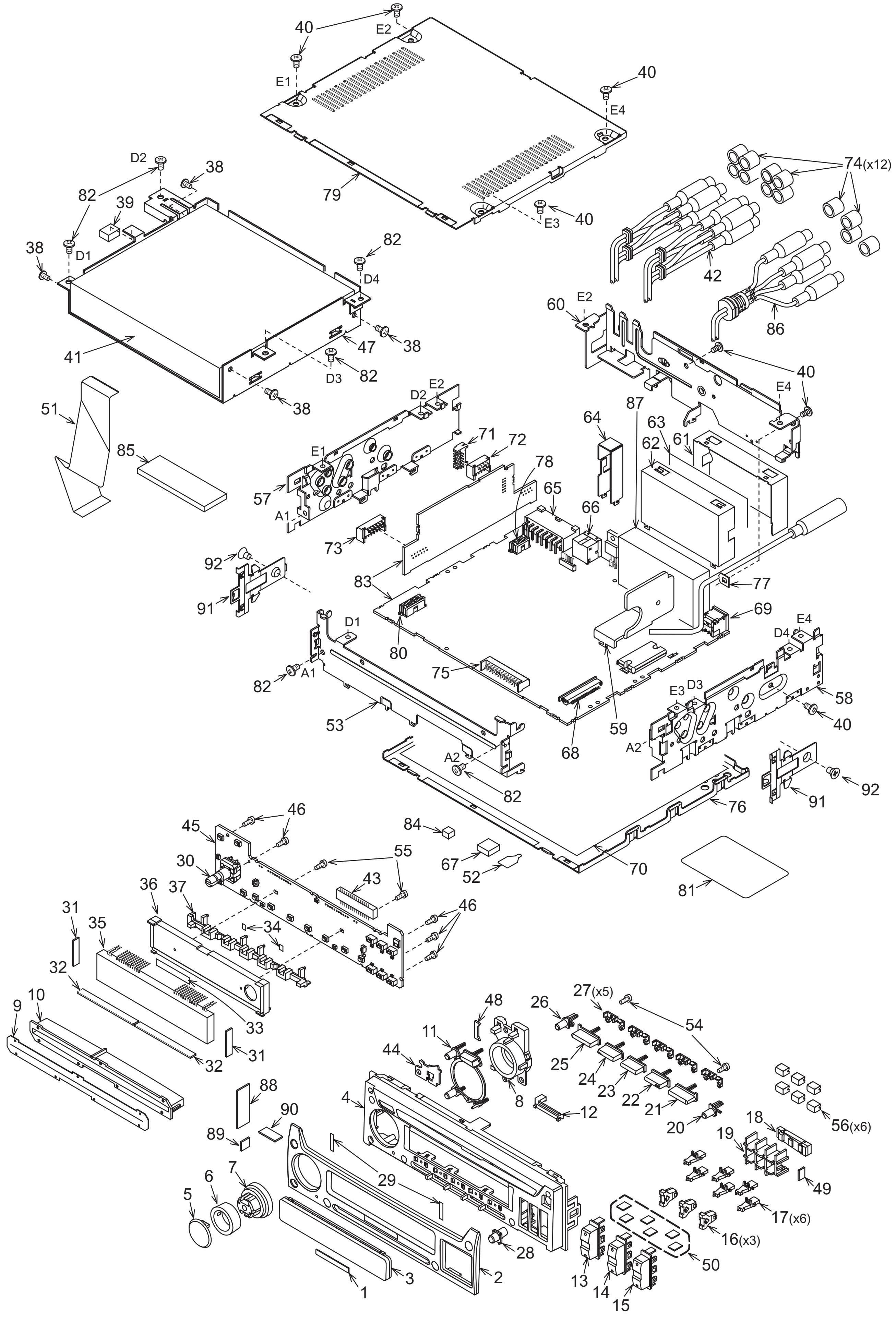


051-3012-90 OP275GS Dual Operational Amplifier



EXPLODED VIEW / PARTS LIST

Main section



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16(x3)
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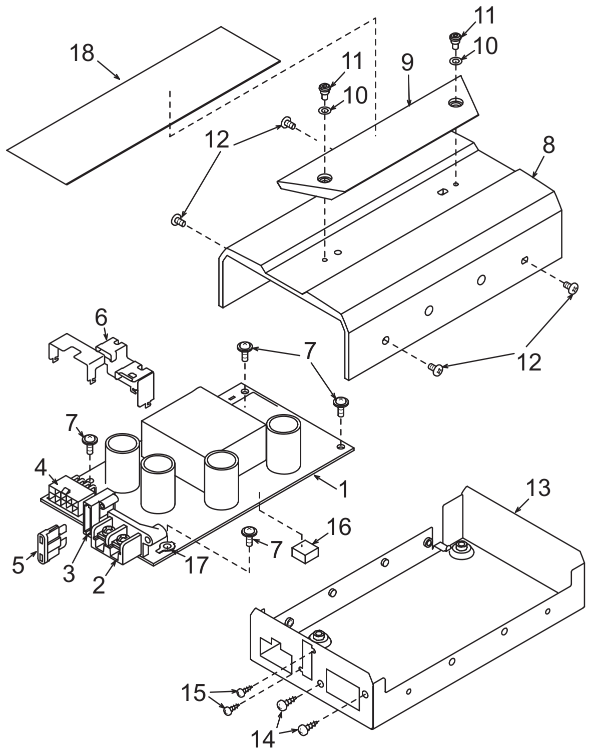
NO.	PART NO.	DESCRIPTION	Q'TY
1	378-0546-00 378-0547-00	BADGE(PE2628BA:DRZ9255) BADGE(PE2628KA:HX-D2)	1 1
2	371-5778-01 371-5778-00	FACE PANEL(PE2628BA) FACE PANEL(PE2628KA)	1 1
3	373-1036-00	DIAL COVER	1
4	370-6112-01	ESCUTCHEON	1
5	380-5591-00	KNOB CAP	1
6	345-5402-00	RUBBER RING	1
7	380-5592-00	INNER KNOB	1
8	335-7212-00	ILLUMI PLATE (L)	1
9	346-0163-00	LEATHER SHEET	1
10	371-5779-00	TRIM PLATE	1
11	382-6997-00	BUTTON (L)	1
12	335-7209-00	PACK ILLUMI	1
13	382-6998-00	BUTTON (1-4)	1
14	382-6999-00	BUTTON (2-5)	1
15	382-7000-00	BUTTON (3-6)	1
16	335-7219-00	BUTTON ILLUMI	3
17	335-7210-00	IND-ILLUMI	6
18	335-7211-00	ILLUMI PLATE	1
19	335-7213-00	BUTTON HOLDER	1
20	382-6995-00	BUTTON (P/A)	1
21	382-6994-00	BUTTON (BAND)	1
22	382-6993-00	BUTTON (>>)	1
23	382-6992-00	BUTTON (ENT)	1
24	382-6991-00	BUTTON (<<)	1
25	382-6990-00	BUTTON (FUNC)	1
26	382-6996-00	BUTTON (D)	1
27	335-7215-00	BUTTON HOLDER	5
28	335-7214-00	IR-FILTER	1
29	347-7383-00	DOUBLE FACE	2
30	016-0025-00	VR W/SHAFT	1
31	347-7384-00	SHADE FILM(R/L)	2
32	347-7385-00	SHADE FILM(VFD)	2
33	347-7386-00	DOUBLE FACE(VFD)	1
34	347-7387-00	DOUBLE FACE(ILLUMI)	2
35	379-4053-28	VFD	1
36	335-7216-00	VFD HOLDER	1
37	335-7218-00	ILLUMI PLATE (C)	1
38	714-2603-81	MACHINE SCREW (M2.6x3)	4
39	345-5798-00	CUSHION	1
40	716-0306-10	SCREW (M3x6)	7
41	929-0291-80	CD MECH MODULE	1
42	855-5505-00	RCA PIN CORD (8CH)	1
43	074-1105-22	OUTLET SOCKET	1
44	347-7408-00	SHADE FILM	1
45	覧覧	SWITCH PWB	1
46	716-0872-01	PAD SCREW (M1.7x5)	5
47	331-3775-00	MECH BRACKET	1
48	347-7380-00	SHADE FILM (L)	1
49	347-7382-00	SHADE FILM (R)	1

NO.	PART NO.	DESCRIPTION	Q'TY
50	347-7379-00	SHADE FILM (PRESET)	6
51	816-4004-00	FLAT WIRE	1
52	347-7376-00	E-SHEET	1
53	309-0798-00	FRONT PLATE	1
54	714-2004-81	MACHINE SCREW (M2x4)	2
55	716-0872-11	SCREW (M1.7x6)	2
56	345-5140-00	RUBBER SPACER	6
57	305-0248-02	SIDE COVER (L)	1
58	305-0249-02	SIDE COVER (R)	1
59	313-1895-00	HEAT SINK	1
60	307-0702-00	REAR COVER	1
61	331-2946-00	SHIELD COVER (R)	1
62	331-2945-00	SHIELD COVER (F)	1
63	347-7377-00	INSULATOR	1
64	313-1781-00	HEAT SINK	1
65	074-1023-16	OUTLET SOCKET (POWER)	1
66	074-1194-00	OUTLET SOCKET (Ce NET)	1
67	345-5796-00	CUSHION	1
68	074-1138-76	OUTLET SOCKET	1
69	075-0385-10	JACK (OPTICAL-IN)	1
70	347-7375-00	INSULATOR	1
71	076-6002-12	PLUG	1
72	076-0515-08	PLUG (8P)	1
73	076-0515-12	PLUG (12P)	1
74	345-3799-01	RUBBER PART	12
75	076-0515-22	PLUG	1
76	304-0470-01	LOWER COVER	1
77	092-2214-00	ANT-RECEPT	1
78	074-1106-08	OUTLET SOCKET	1
79	303-0458-08	UPPER COVER	1
80	074-1106-12	OUTLET SOCKET	1
81	286-6456-00 286-6457-00	SETPLATE(PE2629BA) SETPLATE(PE2629KA)	1 1
82	714-3006-81	MACHINE SCREW (M3x6)	6
83	覧覧	MAIN PWB	1
84	345-5795-00	CUSHION	1
85	345-5797-00	HEAT RUBBER	1
86	855-5500-00	RCA PIN CORD (4CH)	1
87	880-2090B	TUNER PACK	1
88	347-7415-00	FILM	1
89	347-7416-00	FILM	1
90	347-7417-00	FILM	1
91	750-2796-02	SPRING	2
92	714-5008-41	MACHINE SCREW	2

DC-DC converter(EE-1236B-A) section



NO.	PART NO.	DESCRIPTION	Q'TY
1	-----------	DC/DC PWB	1
2	073-0722-01	TERMINAL (BATT/GND)	1
3	077-0091-00	FUSE-RECEPT	1
4	074-0884-02	OUTLET SOCKET (10P)	1
5	060-0057-54	AUTO FUSE(5A)	1
6	331-3776-00	CONECTOR HOLDER	1
7	716-0821-02	IT SCREW	4
8	303-0487-00	UPPER COVER	1
9	383-0715-01	DECORATE PANEL	1
10	345-5443-00	O-RING	2
11	716-3521-00	LOCK SCREW (M3X4)	2
12	714-3006-89	MACHINE SCREW (M3X6)	4
13	311-1886-01	LOWER COVER	1
14	702-3008-89	TAP SCREW	2
15	702-2006-19	TAP SCREW	2
16	345-5444-00	SPACER	1
17	073-0731-01	TERMINAL	1
18	347-7378-00	PROTECT SHEET	1

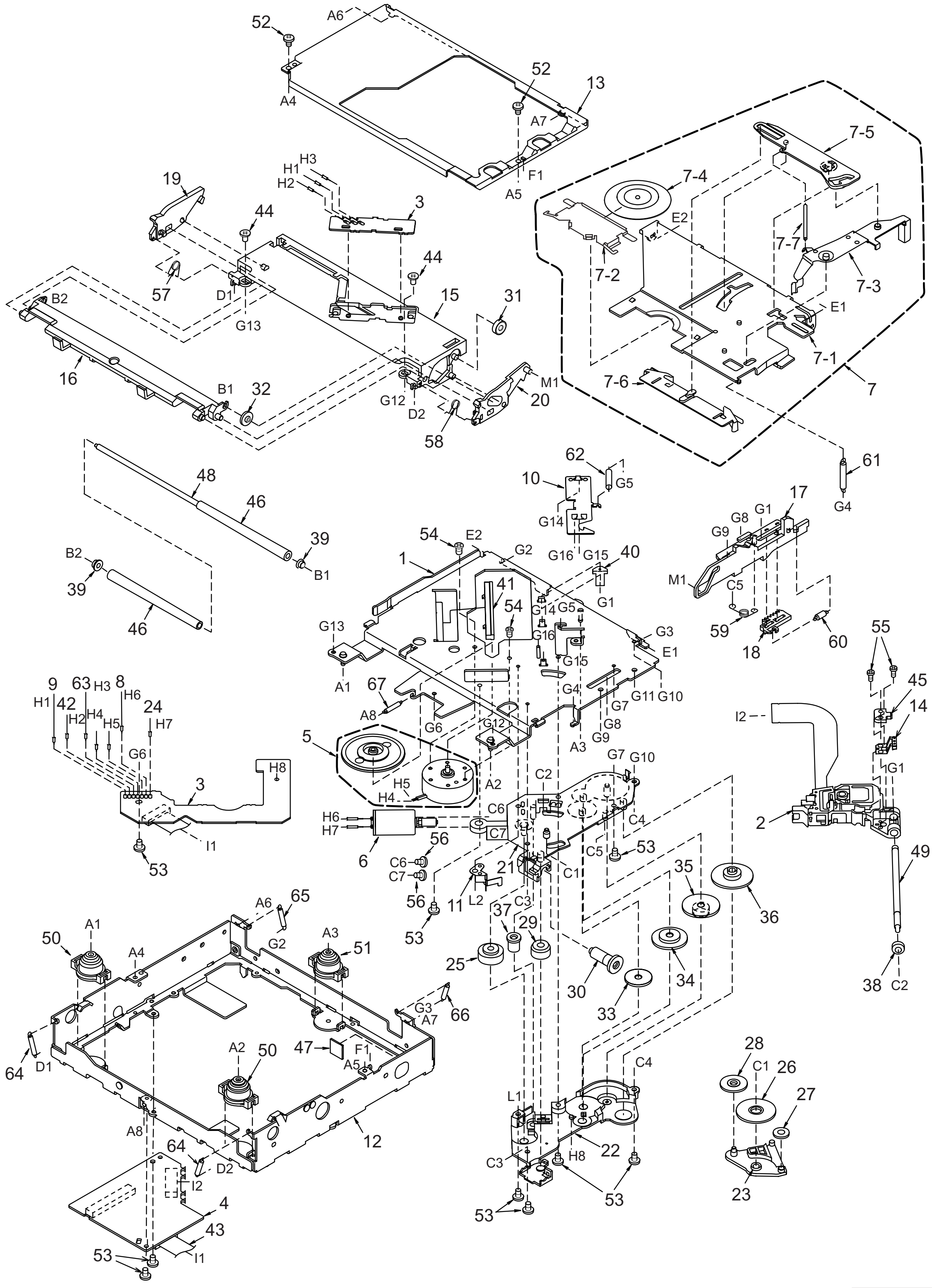
CD mechanism(929-0291-80) section

NO.	PART NO.	DESCRIPTION	Q'TY
1	966-0595-25	DRIVE PLATE ASSY	1
2	969-0065-31	PICK UP UNIT	1
3	-----------	LED PWB	1
4	-----------	CD PWB	1
5	SMA-182-100	MOTOR ASSY(SPINDLE)	1
6	SMA-183-100	MOTOR ASSY(SLED)	1
7	HBS-524-100	CLAMPER SUB ASSY	1
7-1	620-1022-25	CLAMPER LINK	1
7-2	620-1023-23	CLAMPER PLATE	1
7-3	620-1024-23	SENSOR ARM	1
7-4	621-0708-20	CLAMPER RING	1
7-5	621-0626-21	STOPPER LINK	1
7-6	621-0627-21	DISC STOPPER	1
7-7	750-3471-20	SENSOR SPRING	1
8	803-4906-60	VINYL COAT WIRE(ORG)	1
9	816-2591-00	LEAD WIRE(YEL)	1
10	620-1025-22	ID-LOCK PLATE	1
11	620-1026-21	SPRING PLATE	1
12	620-1027-27	LOWER CHASSIS	1
13	620-1028-23	UPPER CHASSIS	1
14	966-0638-20	SH-RACK ASSY	1
15	621-0598-27	UPPER GUIDE	1
16	621-0599-26	ROLLER GUIDE	1
17	621-0600-26	SHIFT LEVER	1
18	621-0601-21	RACK	1
19	621-0602-22	LOCK ARM L	1

NO.	PART NO.	DESCRIPTION	Q'TY
20	621-0603-25	LOCK ARM R	1
21	621-0724-21	GEAR BASE	1
22	621-0605-22	GEAR COVER	1
23	621-0723-20	IDLE CASE	1
24	816-2590-00	VINYL COAT WIRE(GRN)	1
25	621-0608-21	SECOND GEAR	1
26	621-0609-20	BASE GEAR	1
27	621-0610-20	IDLE GEAR A	1
28	621-0611-20	IDLE GEAR B	1
29	621-0612-21	ROLLER GEAR A	1
30	621-0719-20	ROLLER GEAR B	1
31	621-0720-20	ROLLER GEAR C	1
32	621-0721-20	ROLLER GEAR D	1
33	621-0616-20	POWER GEAR A	1
34	621-0617-20	POWER GEAR B	1
35	621-0618-20	POWER GEAR C	1
36	621-0619-20	POWER GEAR D	1
37	621-0620-20	THREAD GEAR A	1
38	621-0621-20	THREAD GEAR B	1
39	621-0622-21	ROLLER SLEEVE	2
40	621-0623-23	LS-HOLDER	1
41	621-0624-22	GUIDE RAIL	1
42	816-2593-00	LEAD WIRE(PUR)	1
43	816-2542-01	FLAT WIRE(10P)	1
44	716-3473-00	IT SCREW(M2 x 3)	2
45	621-0709-20	SH-BASE	1

NO.	PART NO.	DESCRIPTION	Q'TY
46	621-0629-20	LOADING ROLLER	2
47	345-8704-20	CUSHION RUBBER	1
48	622-1571-21	ROLLER SHAFT	1
49	624-0018-01	LEAD SCREW	1
50	629-0081-20	DAMPER F	2
51	629-0082-20	DAMPER R	1
52	714-2003-81	MACHINE SCREW(M2 x 3)	2
53	716-1507-00	SCREW(M2 x 3)	9
54	716-1733-00	SCREW(M1.7 x 2.3)	2
55	716-3469-00	SCREW(ϕ3 x 4)	2
56	716-3446-00	SCREW(M1.4 x 2.5)	2

NO.	PART NO.	DESCRIPTION	Q'TY
57	750-3465-21	ROLLER SPRING L	1
58	750-3466-20	ROLLER SPRING R	1
59	750-3467-21	SHIFT SPRING	1
60	750-3468-20	RACK SPRING	1
61	750-3469-20	CLAMPER SPRING	1
62	750-3470-20	ID-LOCK SPRING	1
63	816-2592-00	LEAD WIRE(BLU)	1
64	750-3472-21	DR-SPRING F	2
65	750-3473-20	DR-SPRING RA	1
66	750-3474-20	DR-SPRING RB	1
67	750-3475-21	DR-SPRING C	1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ELECTRICAL PARTS LIST

Main PWB(B1) section

REF No.	PART No.	DESCRIPTION
BL1	880-2090B	TUNER PACK
C1	168-2232-55	0.022uF K
C2	163-2263-35	16V22uF
C4	163-1053-65	50V1uF
C5	168-3332-78	0.033uF K
C6	168-3332-78	0.033uF K
C7	187-4763-35	16V47uF
C8	168-2232-55	0.022uF K
C9	168-2232-55	0.022uF K
C10	168-6822-55	6800pF K
C11	042-1631-50	10V100uF
C12	042-1631-50	10V100uF
C13	168-1032-55	0.01uF K
C14	168-1532-55	0.015uF K
C16	168-1032-55	0.01uF K
C18	163-3353-65	50V3.3uF
C20	163-4763-15	6.3V47uF
C21	166-1011-50	100pF CH
C22	166-1011-50	100pF CH
C23	166-1011-50	100pF CH
C24	166-3311-50	330pF CH
C25	166-1801-50	18pF CH
C26	166-1501-50	15pF CH
C27	163-2253-65	50V2.2uF
C28	163-2253-65	50V2.2uF
C29	168-2232-55	0.022uF K
C55	166-2201-50	22pF CH
C66	166-2201-50	22pF CH
C67	168-1032-55	0.01uF K
C68	168-1032-55	0.01uF K
C200	187-1073-35	16V 100uF
C201	187-1073-35	16V 100uF
C203	187-1063-35	16V 10uF
C204	042-9129-00	16V270uF
C205	187-4763-35	16V47uF
C206	042-1549-12	16V220uF
C207	187-1063-35	16V 10uF
C208	042-1549-12	16V220uF
C210	163-2263-35	16V22uF
C211	187-4763-35	16V47uF
C212	042-1631-50	10V100uF
C213	042-1631-50	10V100uF
C214	163-1063-35	16V10uF
C215	168-1032-55	0.01uF K
C216	042-1631-50	10V100uF
C217	163-2263-35	16V22uF
C218	172-2231-15	0.022uF
C219	168-1022-55	1000pF K
C220	168-1042-78	16V 0.1uF
C221	187-1063-65	50V10uF
C222	168-1022-55	1000pF K
C223	043-0318-90	5600pF
C224	166-1011-50	100pF CH
C225	168-1032-55	0.01uF K
C226	168-1032-55	0.01uF K
C227	168-1022-55	1000pF K
C228	168-1022-55	1000pF K
C229	168-1032-55	0.01uF K
C230	168-1022-55	1000pF K (PE2628KA)
C231	168-1011-50	100pF CH (PE2628KA)
C233	168-1022-55	1000pF K (PE2628KA)
C301	168-4732-78	0.047uF K
C302	168-4732-78	0.047uF K
C303	042-0654-52	16V 10uF
C304	042-0654-52	16V 10uF
C305	042-0654-52	16V 10uF
C306	042-0654-52	16V 10uF
C307	042-0654-52	16V 10uF
C308	042-0654-52	16V 10uF
C309	042-0654-52	16V 10uF
C310	042-0654-52	16V 10uF
C311	166-3301-50	33pF CH
C312	166-3301-50	33pF CH
C313	166-3301-50	33pF CH
C314	166-3301-50	33pF CH
C315	166-3301-50	33pF CH
C316	166-3301-50	33pF CH
C317	166-3301-50	33pF CH
C318	166-3301-50	33pF CH
C319	163-2253-65	50V2.2uF
C320	163-2253-65	50V2.2uF
C321	163-2253-65	50V2.2uF
C322	163-2253-65	50V2.2uF
C323	187-1073-35	16V 100uF
C324	168-1042-78	16V 0.1uF
C325	042-0654-52	16V 10uF
C326	042-0654-52	16V 10uF
C327	042-0654-52	16V 10uF
C328	042-0654-52	16V 10uF
C329	042-0654-52	16V 10uF
C330	042-0654-52	16V 10uF
C331	042-0654-52	16V 10uF
C332	168-1042-78	16V 0.1uF
C333	042-0654-52	16V 10uF
C334	168-1042-78	16V 0.1uF
C335	168-1042-78	16V 0.1uF
C336	163-1053-65	50V1uF
C337	163-1053-65	50V1uF
C338	163-1053-65	50V1uF
C339	163-1053-65	50V1uF
C340	163-2263-35	16V22uF
C341	178-4742-78	0.47uF
C342	042-0423-97	16V10uF
C343	042-0654-52	16V 10uF
C344	042-0654-52	16V 10uF
C345	042-0654-52	16V 10uF
C346	042-0654-52	16V 10uF
C347	166-3301-50	33pF CH
C348	166-3301-50	33pF CH
C349	166-3301-50	33pF CH
C350	166-3301-50	33pF CH
C351	042-0654-52	16V 10uF
C352	042-0654-52	16V 10uF
C353	042-0654-52	16V 10uF
C354	042-0654-52	16V 10uF
C355	168-1032-55	0.01uF K
C356	168-1032-55	0.01uF K
C357	168-1032-55	0.01uF K
C358	168-1032-55	0.01uF K
C359	168-1022-55	1000pF K
C360	166-1011-50	100pF CH
C401	043-0264-51	2200pF
C402	043-0264-51	2200pF
C403	043-0264-51	2200pF
C404	043-0264-51	2200pF
C405	043-0264-51	2200pF
C406	043-0264-51	2200pF
C407	043-0264-51	2200pF
C408	043-0264-51	2200pF
C409	043-0264-51	2200pF
C410	043-0264-51	2200pF
C411	043-0264-51	2200pF
C412	043-0264-51	2200pF
C413	173-5611-18	560pF J
C414	173-5611-18	560pF J
C415	173-5611-18	560pF J
C416	173-5611-18	560pF J
C417	173-5611-18	560pF J
C418	173-5611-18	560pF J
C419	166-5611-50	560pF CH
C420	166-5611-50	560pF CH
C421	166-2211-50	220pF CH
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C423	166-2211-50	220pF CH
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C425	166-2211-50	220pF CH
C426	166-2211-50	220pF CH
C427	166-2211-50	220pF CH
C428	166-1211-50	12pF CH
C429	166-2211-50	220pF CH
C430	166-2211-50	220pF CH
C431	166-2211-50	220pF CH
C432	166-1211-50	12pF CH
C433	166-2211-50	220pF CH
C434	166-2211-50	220pF CH
C435	166-2211-50	220pF CH
C436	166-1211-50	12pF CH
C437	168-1042-78	16V 0.1uF
C439	168-1022-55	1000pF K (PE2628KA)
C440	042-0654-50	6.3V 22uF
C441	042-0654-50	6.3V 22uF
C442	042-0654-50	6.3V 22uF
C443	042-0654-50	6.3V 22uF
C449	168-1032-55	0.01uF K
C450	168-1032-55	0.01uF K
C451	168-1032-55	0.01uF K
C452	168-1032-55	0.01uF K
C453	168-1032-55	0.01uF K
C454	168-1032-55	0.01uF K
C455	168-1032-55	0.01uF K
C456	168-1032-55	0.01uF K
C457	168-1032-55	0.01uF K
C458	168-1032-55	0.01uF K
C459	168-1032-55	0.01uF K
C460	168-1032-55	0.01uF K
C461	168-1032-55	0.01uF K
C462	168-1032-55	0.01uF K
C463	168-1032-55	0.01uF K
C464	168-1032-55	0.01uF K
C465	042-1505-89	10V10uF(OS)
C466	042-1505-89	10V10uF(OS)
C467	042-1505-89	10V10uF(OS)
C468	042-1505-89	10V10uF(OS)
C469	168-1032-55	0.01uF K
C470	168-1032-55	0.01uF K
C471	168-1032-55	0.01uF K
C472	168-1032-55	0.01uF K
C473	168-1032-55	0.01uF K
C474	168-1032-55	0.01uF K
C475	042-1505-89	10V10uF(OS)
C476	042-1505-89	10V10uF(OS)
C477	042-1505-89	10V10uF(OS)
C478	042-1505-89	10V10uF(OS)
C479	168-1032-55	0.01uF K
C480	168-1032-55	0.01uF K
C481	042-1547-00	16V22uF
C482	042-1547-00	16V22uF
C483	042-1547-00	16V22uF
C484	042-1547-00	16V22uF
C485	042-1547-00	16V22uF
C486	042-1547-00	16V22uF
C487	042-1563-68	16V22uF
C488	042-1563-68	16V22uF
C489	168-1032-55	0.01uF K
C491	042-1547-00	16V22uF
C492	042-1547-00	16V22uF
C493	168-1032-55	0.01uF K
C600	168-1032-55	0.01uF K
C601	042-1576-01	5.5V0.22uF
C603	168-1032-55	0.01uF K
C605	042-1577-00	6.3V100uF
C609	168-4732-78	0.047uF K
C612	163-1063-35	16V10uF
C615	168-1032-55	0.01uF K
C900	168-1032-55	0.01uF K

REF No.	PART No.	DESCRIPTION
C901	168-1042-78	16V 0.1uF
C902	042-0423-20	10V10uF
C903	042-0423-20	10V10uF
C904	168-1042-78	16V 0.1uF
C905	166-8096-50	8pF D CH
C906	166-8096-50	8pF D CH
C908	168-1042-78	16V 0.1uF
C909	168-1042-78	16V 0.1uF
C910	163-1063-35	16V10uF
C911	168-1042-78	16V 0.1uF
C912	168-1042-78	16V 0.1uF
C913	168-1042-78	16V 0.1uF
C914	168-1022-55	1000pF K
C915	042-0423-94	10V 4.7uF
C916	168-1042-78	16V 0.1uF
C917	163-1063-35	16V10uF
C918	168-1042-78	16V 0.1uF
C919	042-0423-20	10V10uF
C920	042-0423-97	16V10uF
C921	042-0423-20	10V10uF
C922	168-1042-78	16V 0.1uF
C923	168-1042-78	16V 0.1uF
C924	042-0423-20	10V10uF
C925	168-1042-78	16V 0.1uF
C926	168-1042-78	16V 0.1uF
C927	168-1042-78	16V 0.1uF
C928	166-1011-50	100pF CH
C929	168-6822-55	6800pF K
C930	168-1042-78	16V 0.1uF
C931	042-0423-20	10V10uF
C932	042-0423-20	10V10uF
C933	168-1042-78	16V 0.1uF
C934	168-1042-78	16V 0.1uF
C935	042-0423-20	10V10uF
C936	168-1032-55	0.01uF K
C937	168-1022-55	1000pF K
C938	178-4742-78	0.47uF
C939	168-1042-78	16V 0.1uF
C940	168-1022-55	1000pF K
C941	042-0423-20	10V10uF
C942	168-1042-78	16V 0.1uF
C943	168-1032-55	0.01uF K
C944	168-1032-55	0.01uF K
C945	042-0423-20	10V10uF
C946	168-1042-78	16V 0.1uF
C947	168-1042-78	16V 0.1uF
C948	168-1042-78	16V 0.1uF
C949	042-0632-50	6.3V47uF
C950	042-0632-50	6.3V47uF
C951	042-0632-50	6.3V47uF
C952	168-1042-78	16V 0.1uF
C953	168-1042-78	16V 0.1uF
C954	168-1042-78	16V 0.1uF
C955	168-1042-78	16V 0.1uF
C956	168-1042-78	16V 0.1uF
C957	168-1042-78	16V 0.1uF
C958	042-0632-50	6.3V47uF
C959	042-0632-50	6.3V47uF
C960	042-0632-50	6.3V47uF
C961	168-1032-55	0.01uF K
C962	042-0592-58	16V10uF
C963	042-0423-97	16V10uF
C964	042-0592-58	16V10uF
C965	042-0592-58	16V10uF
C966	042-0423-97	16V10uF
C967	042-0592-58	16V10uF
C968	042-0592-58	16V10uF
C969	042-0423-97	16V10uF
C970	042-0592-58	16V10uF
C975	166-1011-50	100pF CH (PE2628BA)
C977	166-1011-50	100pF CH
C978	168-1032-55	0.01uF K
C979	166-1011-50	100pF CH
C980	168-1022-55	1000pF K
C981	168-1022-55	1000pF K
C982	168-1032-55	0.01uF K

REF No.	PART No.	DESCRIPTION
C983	166-2211-50	220pF CH (PE2628BA)
C984	168-1032-55	0.01uF K
C986	168-1022-55	1000pF K
C987	168-1032-55	0.01uF K
C988	168-1032-55	0.01uF K
C989	168-1032-55	0.01uF K
C9005	168-1032-55	0.01uF K
C9006	168-1032-55	0.01uF K
CCT901	010-3042-54	BLA3216A601 SG4T1
CCT902	010-3042-54	BLA3216A601 SG4T1
CCT903	010-3042-54	BLA3216A601 SG4T1
CCT904	010-3042-54	BLA3216A601 SG4T1
CCT905	010-3042-54	BLA3216A601 SG4T1
CCT906	010-3042-54	BLA3216A601 SG4T1
CCT907	010-3042-54	BLA3216A601 SG4T1
D201	001-0529-68	MA8180-L
D202	001-0516-90	MA111
D203	001-0516-90	MA111
D205	001-0516-90	MA111
D206	001-0516-90	MA111
D207	001-0516-90	MA111
D208	001-0516-90	MA111
D209	001-0466-91	S5688G
D210	001-0466-91	S5688G
D215	001-0529-32	MA8056-M
D219	001-0529-14	MA8030-L
D301	001-0516-90	MA111
D302	001-0516-90	MA111
D303	001-0516-90	MA111
D311	001-0529-44	MA8082-M
D350	001-0516-90	MA111
D351	001-0516-90	MA111
D352	001-0516-90	MA111
D353	001-0516-90	MA111
D450	001-0529-38	MA8068-M
D451	001-0516-90	MA111
D452	001-0529-38	MA8068-M
D453	001-0516-90	MA111
D454	001-0529-38	MA8068-M
D455	001-0516-90	MA111
D456	001-0529-38	MA8068-M
D600	001-0516-90	MA111
D601	001-0516-90	MA111
D602	001-0516-90	MA111
D603	001-0529-32	MA8056-M
D604	001-0529-32	MA8056-M
D901	001-0516-90	MA111
D902	001-0516-90	MA111
D903	001-0535-90	MA729
D904	001-0535-90	MA729
D905	001-0535-90	MA729
D906	001-0535-90	MA729
D907	001-0535-90	MA729
D908	001-0535-90	MA729
D909	001-0535-90	MA729
D910	001-0535-90	MA729
FIL901	060-3110-90	NFM4516P13C204 FBI
FIL902	060-3110-90	NFM4516P13C204 FBI
FIL903	060-3110-90	NFM4516P13C204 FBI
FIL904	060-3110-90	NFM4516P13C204 FBI
IC1	051-6212-08	LC72191JM-TLM
IC200	051-3297-10	BA4916-V2
IC301	051-3026-90	NJM4580V
IC302	051-3026-90	NJM4580V
IC303	051-5020-90	M61508FP

REF No.	PART No.	DESCRIPTION
IC304	051-3034-90	NJM4558V
IC305	051-7232-08	74VHC4066M
IC306	051-3026-90	NJM4580V
IC307	051-3026-90	NJM4580V
IC401	051-3042-90	OPA2134UA
IC402	051-3042-90	OPA2134UA
IC403	051-3042-90	OPA2134UA
IC404	051-3042-90	OPA2134UA
IC405	051-3042-90	OPA2134UA
IC406	051-3042-90	OPA2134UA
IC407	051-3042-90	OPA2134UA
IC408	051-3042-90	OPA2134UA
IC409	051-3042-90	OPA2134UA
IC410	051-3012-90	OP275GS
IC418	051-5036-90	PGA2310UA
IC419	051-5036-90	PGA2310UA
IC420	051-5036-90	PGA2310UA
IC421	051-5036-90	PGA2310UA
IC600	052-3393-00	M30622MEP-161GP
IC601	051-5437-08	S-80821ANMP-EDJ-E2
IC602	051-6600-58	HA12187FP
IC901	051-7221-58	SN74AHC1G04 HDCKR
IC902	051-7243-48	SN74AHCT1G08 DCKR
IC903	051-6373-18	AK4112BVF-E2
IC905	051-7221-58	SN74AHC1G04 HDCKR
IC906	051-7269-08	SN74AHC2G53 HDCTR
IC907	051-7285-08	CD74HC4050PWR
IC909	051-6709-90	PCM1792DBR
IC910	051-6709-90	PCM1792DBR
IC911	051-6709-90	PCM1792DBR
IC912	051-6620-08	TC9246F
IC913	051-6705-00	AK7720A
IC915	051-6708-90	AK4121VF-E2
IC916	051-9126-00	BS62LV1024STI-70
IC918	051-3232-90	uPC29M33T
J200	074-1023-16	16P
J401	074-1106-08	8P
J402	074-1106-12	12P
J600	074-1194-00	13P CE-NET
J602	074-1138-76	26P
J901	075-0385-10	OPT JACK
JW1	119-0000-05	1/10W 0 ohm JW
JW2	119-0000-05	1/10W 0 ohm JW
JW3	119-0000-05	1/10W 0 ohm JW
L1	010-2275-53	220uH
L2	010-3103-64	MMZ1608Y1
L3	010-3103-64	MMZ1608Y1
L4	010-3406-54	2.2uH
L5	010-3406-54	2.2uH
L52	010-4046-00	30uH
L230	119-0000-05	1/10W 0 ohm JW (PE2629BA)
L230	010-3103-64	MMZ1608Y1 (PE2629KA)
L301	010-3406-66	22uH
L302	010-3406-66	22uH
L310	010-3103-64	MMZ1608Y1
L311	010-3103-64	MMZ1608Y1
L490	010-2326-00	BL02RN2-R62
L601	010-3406-54	2.2uH
L902	010-3103-64	MMZ1608Y1
L903	010-3103-64	MMZ1608Y1
L904	010-3103-64	MMZ1608Y1
L905	010-3103-64	MMZ1608Y1
L906	010-3103-64	MMZ1608Y1
L907	010-3103-64	MMZ1608Y1
L908	010-3103-64	MMZ1608Y1
L910	010-3103-64	MMZ1608Y1
L911	010-3406-62	10uH
L913	010-3103-64	MMZ1608Y1
L914	010-3103-64	MMZ1608Y1
L915	010-3103-64	MMZ1608Y1

REF No.	PART No.	DESCRIPTION
L916	010-3406-66	22uH
L917	010-2285-58	BLM21A102FPB
L918	010-3103-64	MMZ1608Y1
L919	010-3103-64	MMZ1608Y1
L920	010-3103-64	MMZ1608Y1
L921	010-3103-64	MMZ1608Y1
L922	010-3103-64	MMZ1608Y1
L923	010-3103-64	MMZ1608Y1
L924	010-3103-64	MMZ1608Y1
L925	010-3103-64	MMZ1608Y1
L926	010-3103-64	MMZ1608Y1
L927	010-3103-64	MMZ1608Y1
L928	010-3103-64	MMZ1608Y1
L929	010-3103-64	MMZ1608Y1
L930	010-3103-64	MMZ1608Y1
L931	010-3103-64	MMZ1608Y1
L932	010-3103-64	MMZ1608Y1
L933	010-3103-64	MMZ1608Y1
L934	010-3103-64	MMZ1608Y1
L935	010-3103-64	MMZ1608Y1
L936	010-3103-64	MMZ1608Y1
L937	010-3103-64	MMZ1608Y1
L938	010-3103-64	MMZ1608Y1
L939	010-3103-64	MMZ1608Y1
L940	010-3103-64	MMZ1608Y1
L941	010-3103-64	MMZ1608Y1
L942	010-3103-64	MMZ1608Y1
L946	010-3103-64	MMZ1608Y1
L947	010-3103-64	MMZ1608Y1
L948	010-3103-64	MMZ1608Y1
L949	010-3103-64	MMZ1608Y1
L950	010-3103-64	MMZ1608Y1
L951	010-3103-64	MMZ1608Y1
L952	010-3103-64	MMZ1608Y1
L953	010-3103-64	MMZ1608Y1
L954	010-3103-64	MMZ1608Y1
L955	010-3103-64	MMZ1608Y1
L956	010-3103-64	MMZ1608Y1
L957	010-3103-64	MMZ1608Y1
L958	010-3103-64	MMZ1608Y1
L959	010-3103-64	MMZ1608Y1
L960	010-3103-64	MMZ1608Y1
L961	010-3103-64	MMZ1608Y1
L962	010-3103-64	MMZ1608Y1
L963	010-3103-64	MMZ1608Y1
L964	010-3103-64	MMZ1608Y1
L965	010-3103-64	MMZ1608Y1
L966	010-3103-64	MMZ1608Y1
P1	076-0515-22	22P
P401	076-0515-08	8P
P402	076-0515-12	12P
P501	076-6002-12	PLUG
Q1	192-2712-51	2SC2712G,L
Q2	192-2712-51	2SC2712G,L
Q3	193-1858-00	2SD1858
Q4	125-2004-93	RN1403
Q5	190-1162-00	2SA1162
Q6	190-1162-00	2SA1162
Q7	190-1162-00	2SA1162
Q201	125-2004-96	RN1406
Q202	190-1298-00	2SA1298
Q203	192-2712-00	2SC2712
Q204	190-1162-00	2SA1162
Q205	190-1162-00	2SA1162
Q207	192-2712-00	2SC2712
Q215	103-2012-00	2SD2012
Q216	125-2004-93	RN1403
Q217	191-1237-00	2SB1237
Q218	125-2004-93	RN1403
Q219	191-1237-00	2SB1237
Q220	125-2004-93	RN1403
Q230	191-1237-50	2SB1237QR
Q234	125-0002-92	RN2402
Q235	193-1802-60	2SD1802FA-R.S.T
Q236	125-2004-92	RN1402
Q238	125-0013-97	RN2427
Q239	125-2004-92	RN1402
Q240	125-2004-96	RN1406
Q300	125-2004-93	RN1403
Q301	125-2004-96	RN1406
Q302	192-2712-00	2SC2712
Q303	125-2004-92	RN1402
Q413	193-1328-00	2SD1328
Q414	193-1328-00	2SD1328
Q415	193-1328-00	2SD1328
Q416	193-1328-00	2SD1328
Q417	193-1328-00	2SD1328
Q418	125-0002-92	RN2402
Q419	193-1328-00	2SD1328
Q420	125-0002-92	RN2402
Q421	193-1328-00	2SD1328
Q422	193-1328-00	2SD1328
Q600	125-2004-92	RN1402
Q601	125-2004-93	RN1403
Q602	125-2004-93	RN1403
Q603	190-1162-00	2SA1162
Q604	125-0002-92	RN2402
Q605	125-2004-93	RN1403
Q606	125-2004-93	RN1403
Q901	125-2004-92	RN1402
Q902	125-2004-93	RN1403
Q903	125-2004-92	RN1402
Q904	125-2004-92	RN1402
R1	119-1021-15	1/10W 1k ohm
R2	119-3311-15	1/10W 330 ohm
R3	119-4721-15	1/10W 4.7k ohm
R4	119-4721-15	1/10W 4.7k ohm
R5	119-1231-15	1/10W 12k ohm
R6	119-1231-15	1/10W 12k ohm
R7	119-1231-15	1/10W 12k ohm
R9	119-4741-15	1/10W 470k ohm
R10	119-2221-15	1/10W 2.2k ohm
R14	119-5631-15	1/10W 56k ohm
R15	119-1031-15	1/10W 10k ohm
R16	119-2221-15	1/10W 2.2k ohm
R17	119-1521-15	1/10W 1.5k ohm
R18	119-1031-15	1/10W 10k ohm
R19	119-1031-15	1/10W 10k ohm
R20	119-1031-15	1/10W 10k ohm
R21	119-1021-15	1/10W 1k ohm
R24	119-1521-15	1/10W 1.5k ohm
R25	119-1521-15	1/10W 1.5k ohm
R27	119-1021-15	1/10W 1k ohm
R28	119-1021-15	1/10W 1k ohm
R29	119-1021-15	1/10W 1k ohm
R30	119-1041-15	1/10W 100k ohm
R83	119-1021-15	1/10W 1k ohm
R200	119-1041-15	1/10W 100k ohm
R201	119-1041-15	1/10W 100k ohm
R202	119-5621-15	1/10W 5.6k ohm
R203	119-4731-15	1/10W 47k ohm
R204	119-5631-15	1/10W 56k ohm
R205	119-1031-15	1/10W 10k ohm
R206	119-1031-15	1/10W 10k ohm
R207	119-1021-15	1/10W 1k ohm
R209	119-1531-15	1/10W 15k ohm
R210	119-1031-15	1/10W 10k ohm
R211	119-4731-15	1/10W 47k ohm
R212	119-4721-15	1/10W 4.7k ohm
R213	119-2221-15	1/10W 2.2k ohm
R216	119-1021-15	1/10W 1k ohm
R217	119-2231-15	1/10W 22k ohm
R224	119-4701-15	1/10W 47 ohm
R225	119-1031-15	1/10W 10k ohm
R226	116-1221-15	1/4W 1.2k ohm
R227	119-1031-15	1/10W 10k ohm
R228	116-1221-15	1/4W 1.2k ohm
R229	116-1521-15	1/4W 1.5k ohm
R230	119-2221-15	1/10W 2.2k ohm
R231	116-2211-15	1/4W 220 ohm
R233	119-1031-15	1/10W 10k ohm
R234	119-1031-15	1/10W 10k ohm
R235	119-2221-15	1/10W 2.2k ohm
R255	116-4701-15	1/4W 47 ohm
R256	116-4701-15	1/4W 47 ohm
R257	116-1221-15	1/4W 1.2k ohm
R301	119-1041-15	1/10W 100k ohm
R302	119-1041-15	1/10W 100k ohm
R303	119-1041-15	1/10W 100k ohm
R304	119-1041-15	1/10W 100k ohm
R305	119-1021-15	1/10W 1k ohm
R306	119-1021-15	1/10W 1k ohm
R307	032-0140-58	1/10W 51k ohm F
R308	032-0140-58	1/10W 51k ohm F
R309	032-0140-58	1/10W 51k ohm F
R310	032-0140-58	1/10W 51k ohm F
R311	032-0140-58	1/10W 51k ohm F
R312	032-0140-58	1/10W 51k ohm F
R313	032-0140-58	1/10W 51k ohm F
R314	032-0140-58	1/10W 51k ohm F
R315	119-1031-15	1/10W 10k ohm
R316	119-1031-15	1/10W 10k ohm
R317	119-1031-15	1/10W 10k ohm
R318	119-1031-15	1/10W 10k ohm
R319	119-1031-15	1/10W 10k ohm
R320	119-1031-15	1/10W 10k ohm
R321	119-1031-15	1/10W 10k ohm
R322	119-1031-15	1/10W 10k ohm
R323	032-0140-96	1/10W 120k ohm F
R324	032-0140-96	1/10W 120k ohm F
R325	032-0140-96	1/10W 120k ohm F
R326	032-0140-96	1/10W 120k ohm F
R327	119-4721-15	1/10W 4.7k ohm
R328	119-4721-15	1/10W 4.7k ohm
R329	119-1241-15	1/10W 120k ohm
R330	119-1041-15	1/10W 100k ohm
R331	119-1221-15	1/10W 1.2k ohm
R332	119-1021-15	1/10W 1k ohm
R333	119-3311-15	1/10W 330 ohm
R334	119-3311-15	1/10W 330 ohm
R335	119-3311-15	1/10W 330 ohm
R336	119-3311-15	1/10W 330 ohm
R337	032-0140-51	1/10W 15k ohm F
R338	032-0140-51	1/10W 15k ohm F
R339	032-0140-51	1/10W 15k ohm F
R340	032-0140-51	1/10W 15k ohm F
R341	119-1011-15	1/10W 100 ohm
R342	119-1011-15	1/10W 100 ohm
R343	119-1011-15	1/10W 100 ohm
R344	119-1011-15	1/10W 100 ohm
R345	119-4731-15	1/10W 47k ohm
R346	119-2731-15	1/10W 27k ohm
R347	119-2731-15	1/10W 27k ohm
R348	119-1031-15	1/10W 10k ohm
R349	119-1031-15	1/10W 10k ohm
R350	119-1031-15	1/10W 10k ohm
R351	119-1831-15	1/10W 18k ohm
R352	119-1021-15	1/10W 1k ohm
R353	119-1021-15	1/10W 1k ohm
R354	119-8221-15	1/10W 8.2k ohm
R355	119-1021-15	1/10W 1k ohm
R356	119-1021-15	1/10W 1k ohm
R357	119-2231-15	1/10W 22k ohm
R358	119-2731-15	1/10W 27k ohm
R359	119-2731-15	1/10W 27k ohm
R360	119-5631-15	1/10W 56k ohm
R361	119-1031-15	1/10W 10k ohm
R362	119-1031-15	1/10W 10k ohm
R363	119-1031-15	1/10W 10k ohm
R364	119-1031-15	1/10W 10k ohm
R365	119-1031-15	1/10W 10k ohm
R366	119-1041-15	1/10W 100k ohm
R367	119-1041-15	1/10W 100k ohm
R368	119-1041-15	1/10W 100k ohm
R369	119-1041-15	1/10W 100k ohm
R370	119-1041-15	1/10W 100k ohm
R371	119-1041-15	1/10W 100k ohm
R372	119-1041-15	1/10W 100k ohm
R373	119-1041-15	1/10W 100k ohm
R401	032-0165-50	1/4W 750 ohm
R402	032-0165-50	1/4W 750 ohm

REF No.	PART No.	DESCRIPTION
R403	032-0165-50	1/4W 750 ohm
R404	032-0165-50	1/4W 750 ohm
R405	032-0165-50	1/4W 750 ohm
R406	032-0165-50	1/4W 750 ohm
R407	032-0165-50	1/4W 750 ohm
R408	032-0165-50	1/4W 750 ohm
R409	032-0165-50	1/4W 750 ohm
R410	032-0165-50	1/4W 750 ohm
R411	032-0165-50	1/4W 750 ohm
R412	032-0165-50	1/4W 750 ohm
R413	032-0144-51	1/8W 4.7k ohm J
R414	032-0144-51	1/8W 4.7k ohm J
R415	032-0144-51	1/8W 4.7k ohm J
R416	032-0144-51	1/8W 4.7k ohm J
R417	032-0144-51	1/8W 4.7k ohm J
R418	032-0144-51	1/8W 4.7k ohm J
R419	032-0144-51	1/8W 4.7k ohm J
R420	032-0144-51	1/8W 4.7k ohm J
R421	032-0144-51	1/8W 4.7k ohm J
R422	032-0144-51	1/8W 4.7k ohm J
R423	032-0144-51	1/8W 4.7k ohm J
R424	032-0144-51	1/8W 4.7k ohm J
R425	117-5621-15	1/8W 5.6k ohm
R426	117-5621-15	1/8W 5.6k ohm
R427	117-5621-15	1/8W 5.6k ohm
R428	117-5621-15	1/8W 5.6k ohm
R429	032-0154-52	1/4W 4.7k ohm
R430	032-0144-51	1/8W 4.7k ohm J
R431	032-0144-51	1/8W 4.7k ohm J
R432	032-0154-52	1/4W 4.7k ohm
R433	032-0154-52	1/4W 4.7k ohm
R434	032-0144-51	1/8W 4.7k ohm J
R435	032-0144-51	1/8W 4.7k ohm J
R436	032-0154-52	1/4W 4.7k ohm
R437	032-0154-52	1/4W 4.7k ohm
R438	032-0144-51	1/8W 4.7k ohm J
R439	032-0144-51	1/8W 4.7k ohm J
R440	032-0154-52	1/4W 4.7k ohm
R441	032-0154-52	1/4W 4.7k ohm
R442	032-0144-51	1/8W 4.7k ohm J
R443	032-0144-51	1/8W 4.7k ohm J
R444	032-0154-52	1/4W 4.7k ohm
R445	032-0154-52	1/4W 4.7k ohm
R446	032-0144-51	1/8W 4.7k ohm J
R447	032-0144-51	1/8W 4.7k ohm J
R448	032-0154-52	1/4W 4.7k ohm
R449	032-0154-52	1/4W 4.7k ohm
R450	032-0144-51	1/8W 4.7k ohm J
R451	032-0144-51	1/8W 4.7k ohm J
R452	032-0154-52	1/4W 4.7k ohm
R453	032-0144-67	1/8W 18k ohm J
R454	117-5621-15	1/8W 5.6k ohm
R455	117-5621-15	1/8W 5.6k ohm
R456	032-0144-67	1/8W 18k ohm J
R457	032-0144-67	1/8W 18k ohm J
R458	117-5621-15	1/8W 5.6k ohm
R459	117-5621-15	1/8W 5.6k ohm

REF No.	PART No.	DESCRIPTION
R460	032-0144-67	1/8W 18k ohm J
R461	119-1021-15	1/10W 1k ohm
R509	119-1041-15	1/10W 100k ohm
R510	119-1041-15	1/10W 100k ohm
R511	119-1041-15	1/10W 100k ohm
R513	032-0144-64	1/8W 330 ohm J
R514	032-0144-68	1/8W 22k ohm J
R515	119-1021-15	1/10W 1k ohm
R516	032-0144-68	1/8W 22k ohm J
R517	119-1021-15	1/10W 1k ohm
R518	032-0144-64	1/8W 330 ohm J
R519	032-0144-64	1/8W 330 ohm J
R520	032-0144-68	1/8W 22k ohm J
R521	119-1021-15	1/10W 1k ohm
R522	032-0144-68	1/8W 22k ohm J
R523	119-1021-15	1/10W 1k ohm
R524	032-0144-64	1/8W 330 ohm J
R525	032-0144-64	1/8W 330 ohm J
R526	032-0144-68	1/8W 22k ohm J
R527	119-1021-15	1/10W 1k ohm
R528	032-0144-68	1/8W 22k ohm J
R529	119-1021-15	1/10W 1k ohm
R530	032-0144-64	1/8W 330 ohm J
R531	032-0144-64	1/8W 330 ohm J
R532	032-0144-68	1/8W 22k ohm J
R533	119-1021-15	1/10W 1k ohm
R534	032-0144-68	1/8W 22k ohm J
R535	119-1021-15	1/10W 1k ohm
R536	032-0144-64	1/8W 330 ohm J
R538	119-1051-15	1/10W 1M ohm
R539	119-1051-15	1/10W 1M ohm
R600	119-3321-15	1/10W 3.3k ohm
R601	119-4731-15	1/10W 47k ohm
R602	119-4721-15	1/10W 4.7k ohm
R603	119-6801-15	1/10W 68 ohm
R604	119-1031-15	1/10W 10k ohm
R605	119-1031-15	1/10W 10k ohm
R606	119-5621-15	1/10W 5.6k ohm
R607	119-1031-15	1/10W 10k ohm
R608	116-1221-15	1/4W 1.2k ohm
R609	119-1021-15	1/10W 1k ohm
R610	119-1021-15	1/10W 1k ohm
R611	119-1021-15	1/10W 1k ohm
R612	119-1021-15	1/10W 1k ohm
R613	119-4721-15	1/10W 4.7k ohm
R614	119-3321-15	1/10W 3.3k ohm
R615	119-3321-15	1/10W 3.3k ohm
R616	119-3311-15	1/10W 330 ohm
R617	119-1031-15	1/10W 10k ohm
R618	119-1031-15	1/10W 10k ohm
R622	119-2231-15	1/10W 22k ohm
R625	119-1041-15	1/10W 100k ohm
R626	119-1041-15	1/10W 100k ohm
R627	119-4731-15	1/10W 47k ohm
R628	119-4731-15	1/10W 47k ohm
R629	119-4721-15	1/10W 4.7k ohm
R633	119-0000-05	1/10W 0 ohm JW

REF No.	PART No.	DESCRIPTION
R634	119-0000-05	1/10W 0 ohm JW (PE2629KA)
R638	119-1041-15	1/10W 100k ohm
R642	119-0000-05	1/10W 0 ohm JW (PE2629BA)
R650	119-1021-15	1/10W 1k ohm
R651	119-1021-15	1/10W 1k ohm
R652	119-1021-15	1/10W 1k ohm
R901	119-8211-15	1/10W 820 ohm
R902	119-8211-15	1/10W 820 ohm
R903	119-8211-15	1/10W 820 ohm
R904	119-1031-15	1/10W 10k ohm
R905	119-3321-15	1/10W 3.3k ohm
R906	032-0140-80	1/10W 18k ohm F
R907	119-4711-15	1/10W 470 ohm
R908	119-4711-15	1/10W 470 ohm
R909	119-1011-15	1/10W 100 ohm
R910	119-2221-15	1/10W 2.2k ohm
R911	119-3311-15	1/10W 330 ohm
R912	119-1001-15	1/10W 10 ohm
R913	119-3311-15	1/10W 330 ohm
R914	119-1521-15	1/10W 1.5k ohm
R915	119-4711-15	1/10W 470 ohm
R916	119-1011-15	1/10W 100 ohm
R917	119-1021-15	1/10W 1k ohm
R918	119-1031-15	1/10W 10k ohm
R919	119-1031-15	1/10W 10k ohm
R920	119-1021-15	1/10W 1k ohm
R921	119-1021-15	1/10W 1k ohm
R922	119-1021-15	1/10W 1k ohm
R923	119-5611-15	1/10W 560 ohm
R924	119-1031-15	1/10W 10k ohm
R925	119-2711-15	1/10W 270 ohm
R926	119-3311-15	1/10W 330 ohm
R927	119-3311-15	1/10W 330 ohm
R928	119-3311-15	1/10W 330 ohm
R929	119-3311-15	1/10W 330 ohm
R930	119-5621-15	1/10W 5.6k ohm
R931	119-3311-15	1/10W 330 ohm
R932	119-1041-15	1/10W 100k ohm
R934	119-1041-15	1/10W 100k ohm
R935	119-1221-15	1/10W 1.2k ohm
R936	119-1521-15	1/10W 1.5k ohm
R937	119-1041-15	1/10W 100k ohm
R938	119-1041-15	1/10W 100k ohm
R945	119-1031-15	1/10W 10k ohm
R946	119-1031-15	1/10W 10k ohm
R947	119-1031-15	1/10W 10k ohm
SUP51	060-0122-20	DSP-141N-S00B
X1	061-1066-00	7.2MHz
X601	060-1505-50	10MHz
X602	060-0100-51	BUZZER
X901	061-3542-90	18.432MHz
PWB	039-2566-00	PWB(WITHOUT COMPONENT)

Switch PWB(B2) section

REF No.	PART No.	DESCRIPTION
C703	042-0423-97	16V10uF
C706	168-1042-78	16V 0.1uF
C707	042-0423-97	16V10uF
C709	168-1032-55	0.01uF
C710	168-1032-55	0.01uF
C711	168-1042-78	16V 0.1uF
D702	001-7048-91	RFR1112H-22-TR
D703	001-7048-91	RFR1112H-22-TR
D704	001-7048-91	RFR1112H-22-TR
D705	001-7048-91	RFR1112H-22-TR
D706	001-7048-91	RFR1112H-22-TR
D707	001-7048-91	RFR1112H-22-TR
D712	001-7078-90	NSCW505T
D714	001-7078-90	NSCW505T
D715	001-7040-91	NSCW100-T

REF No.	PART No.	DESCRIPTION
D716	001-7040-91	NSCW100-T
D718	001-0529-14	MA8030-L
D719	001-0584-15	MA8036
D720	001-0584-23	MA8075
D721	001-0584-23	MA8075
D722	001-0584-23	MA8075
D723	001-0584-23	MA8075
D724	001-7040-91	NSCW100-T
D725	001-7040-91	NSCW100-T
D726	001-0584-23	MA8075
D727	001-0584-23	MA8075
D728	001-0584-23	MA8075
D729	001-0584-23	MA8075
D730	001-0584-23	MA8075
D751	001-0516-90	MA111

REF No.	PART No.	DESCRIPTION
D752	001-0516-90	MA111
D753	001-0516-90	MA111
D754	001-0516-90	MA111
FL701	379-4053-28	VFD
IC701	051-6643-90	M66010GP-201D
IR701	060-4017-90	IR RECEIVER
J702	074-1105-22	SOCKET(22P)
L701	010-3406-66	22uH
Q207	192-2873-00	2SC2873
R705	119-6811-15	1/10W 680 ohm
R706	119-6811-15	1/10W 680 ohm
R707	119-6811-15	1/10W 680 ohm
R708	119-6811-15	1/10W 680 ohm
R709	119-6811-15	1/10W 680 ohm
R710	119-6811-15	1/10W 680 ohm

REF No.	PART No.	DESCRIPTION
R711	119-4711-15	1/10W 470 ohm
R714	119-4721-15	1/10W 4.7k ohm
R715	119-4721-15	1/10W 4.7k ohm
R716	119-1031-15	1/10W 10k ohm
R717	119-4711-15	1/10W 470 ohm
R718	119-4711-15	1/10W 470 ohm
R719	119-4711-15	1/10W 470 ohm
R720	119-5611-15	1/10W 560 ohm
R721	119-4711-15	1/10W 470 ohm
R722	119-4711-15	1/10W 470 ohm
R723	119-4711-15	1/10W 470 ohm
R724	119-4711-15	1/10W 470 ohm
R725	119-4711-15	1/10W 470 ohm
R726	119-4711-15	1/10W 470 ohm
R727	119-4711-15	1/10W 470 ohm
R728	119-4711-15	1/10W 470 ohm

REF No.	PART No.	DESCRIPTION
R730	119-2201-15	1/10W 22 ohm
R760	119-3921-15	1/10W 3.9k ohm
R761	119-1041-15	1/10W 100k ohm
R762	119-1011-15	1/10W 100 ohm
R771	119-1031-15	1/10W 10k ohm
R772	119-1031-15	1/10W 10k ohm
R773	119-1031-15	1/10W 10k ohm
R774	119-1031-15	1/10W 10k ohm
R776	119-1041-15	1/10W 100k ohm
R777	119-1041-15	1/10W 100k ohm
R778	119-1041-15	1/10W 100k ohm
R779	119-1041-15	1/10W 100k ohm
S701	013-6312-50	SKRP-ABE-010
S702	013-6312-50	SKRP-ABE-010
S703	013-6312-50	SKRP-ABE-010
S704	013-6312-50	SKRP-ABE-010

REF No.	PART No.	DESCRIPTION
S705	013-6312-50	SKRP-ABE-010
S706	013-6305-50	SKQMAH
S707	013-6305-50	SKQMAH
S708	013-6312-50	SKRP-ABE-010
S709	013-6305-50	SKQMAH
S710	013-6305-50	SKQMAH
S711	013-6312-50	SKRP-ABE-010
S712	013-6312-50	SKRP-ABE-010
S713	013-6305-50	SKQMAH
S714	013-6305-50	SKQMAH
S715	013-6312-50	SKRP-ABE-010
S716	013-6312-50	SKRP-ABE-010
S717	013-6312-50	SKRP-ABE-010
S718	016-0025-00	VR W/SHAFT
PWB	039-2567-00	PWB(WITHOUT COMPONENT)

DC/DC PWB(B3) section

REF No.	PART No.	DESCRIPTION
C202	042-1393-00	35V100uF
C205	042-9134-00	63V47uF
C206	042-9134-00	63V47uF
C216	172-1031-15	0.01uF
C250	042-1676-00	16V470uF
C252	043-0251-10	0.1uF
C254	042-1677-00	35V1000uF
C256	043-0251-10	0.1uF
C258	187-1063-37	16V10uF
C259	042-9129-00	16V270uF
C260	042-1548-03	16V100uF
C261	042-1548-03	16V100uF
C262	042-1504-05	16V22uF
C263	042-1504-05	16V22uF
C264	042-1676-00	16V470uF

REF No.	PART No.	DESCRIPTION
C265	042-1676-00	16V470uF
D250	001-0188-01	1S1885A
D251	001-4003-00	ZSA5A27
D252	001-0466-91	S5688G
F201	060-8049-01	FUSE 0.5A
FR251	060-0057-54	FUSE 5A
IC202	060-6026-00	DC-DC CONV
IC250	060-6008-00	HMA-1570-2492
J250	073-0722-01	10P
J251	074-0884-02	OUTLET SOCKET
L201	010-6009-88	220uH
L202	010-2165-05	150uH
L250	010-2303-00	20uH
L251	010-2303-00	20uH
L252	010-2326-00	BL02RN2-R62

REF No.	PART No.	DESCRIPTION
L253	010-8028-00	520uH
L254	010-8028-00	520uH
Q205	191-1243-00	2SB1243
Q206	192-2458-00	2SC2458
Q251	192-2458-00	2SC2458
R213	111-2221-94	1/4W 2.2k ohm
R214	111-1031-94	1/4W 10k ohm
R215	111-1521-94	1/4W 1.5k ohm
R216	111-8221-94	1/4W 8.2k ohm
R217	114-3311-11	1W 330 ohm
R222	111-1031-94	1/4W 10k ohm
R253	111-1031-94	1/4W 10k ohm
R254	111-4721-94	1/4W 4.7k ohm
PWB	039-2568-00	PWB(WITHOUT COMPONENT)

CD PWB(B4) section

REF No.	PART No.	DESCRIPTION
C1	168-1042-78	16V 0.1uF
C3	163-2273-05	4V220uF
C4	168-1042-78	16V 0.1uF
C5	163-1073-35	16V100uF
C6	163-1073-35	16V100uF
C7	168-1042-78	16V 0.1uF
C9	178-1052-78	1uF
C10	042-0560-85	6.3V100uF
C11	046-4712-58	470pF
C12	178-1052-78	1uF
C13	046-4712-58	470pF
C15	168-1042-78	16V 0.1uF
C16	168-4732-78	0.047uF
C17	168-4732-78	0.047uF
C18	168-1042-78	16V 0.1uF
C19	168-1042-78	16V 0.1uF
C21	046-6822-58	6800pF
C22	046-3332-78	0.033uF
C24	178-1052-78	1uF
C25	168-1042-78	16V 0.1uF
C26	168-1042-78	16V 0.1uF
C28	168-1042-78	16V 0.1uF
C29	168-1042-78	16V 0.1uF
C30	045-6801-50	68pF
C31	168-1042-78	16V 0.1uF
C32	168-1042-78	16V 0.1uF
C33	046-1532-78	0.015uF
C34	168-1042-78	16V 0.1uF

REF No.	PART No.	DESCRIPTION
C35	046-6812-58	680pF
C36	168-1042-78	16V 0.1uF
C37	168-1042-78	16V 0.1uF
C38	046-1522-58	1500pF
C39	046-4722-58	4700pF
C40	046-1032-78	0.01uF
C41	046-1532-78	0.015uF
C43	168-1042-78	16V 0.1uF
C45	045-6097-50	6pF
C47	045-4701-50	47pF
C48	168-1042-78	16V 0.1uF
C49	168-1042-78	16V 0.1uF
C50	042-0666-00	12.5V 22uF
C51	046-5622-58	5600pF
C52	178-1052-78	1uF
C53	045-1007-50	10pF
C54	045-1007-50	10pF
C55	178-1052-78	1uF
CCT2	050-0140-63	1/32W 47k ohm x4J
D1	001-0367-91	1SS226
IC1	051-6071-08	BA5825FP-E2
IC2	051-6399-00	TC94A15F
J101	074-1228-76	26P
J201	074-1138-65	15P
J301	074-1138-60	10P
Q1	131-1188-50	2SB1188PQR
Q2	131-1188-50	2SB1188PQR
R1	117-6811-15	1/8W 680 ohm

REF No.	PART No.	DESCRIPTION
R2	117-1001-15	1/8W 10 ohm
R9	033-2211-15	1/10W 220 ohm
R11	033-1051-15	1/10W 1M ohm
R12	119-2221-15	1/10W 2.2k ohm
R13	033-2211-15	1/10W 220 ohm
R14	033-2211-15	1/10W 220 ohm
R16	033-2231-15	1/10W 22k ohm
R17	033-1011-15	1/10W 100 ohm
R18	033-3341-15	1/10W 330k ohm
R19	033-5621-15	1/10W 5.6k ohm
R21	033-2231-15	1/10W 22k ohm
R22	033-4731-15	1/10W 47k ohm
R24	033-1041-15	1/10W 100k ohm
R26	033-1531-15	1/10W 15k ohm
R27	033-4731-15	1/10W 47k ohm
R28	033-1831-15	1/10W 18k ohm
R29	033-6821-15	1/10W 6.8k ohm
R30	033-8231-15	1/10W 82k ohm
R31	033-8231-15	1/10W 82k ohm
R32	119-1001-15	1/10W 10 ohm
R33	033-2731-15	1/10W 27k ohm
R34	033-2731-15	1/10W 27k ohm
R35	033-2731-15	1/10W 27k ohm
R36	033-2731-15	1/10W 27k ohm
R37	032-0162-50	1/10W 0.51 ohm
X2	061-3534-90	16.92MHz
PWB	039-2435-20	PWB(WITHOUT COMPONENT)

LED PWB(B5)

REF No.	PART No.	DESCRIPTION
D1	001-7058-90	AN1105W-RR
D2	001-7058-90	AN1105W-RR
J1	074-1138-60	10P

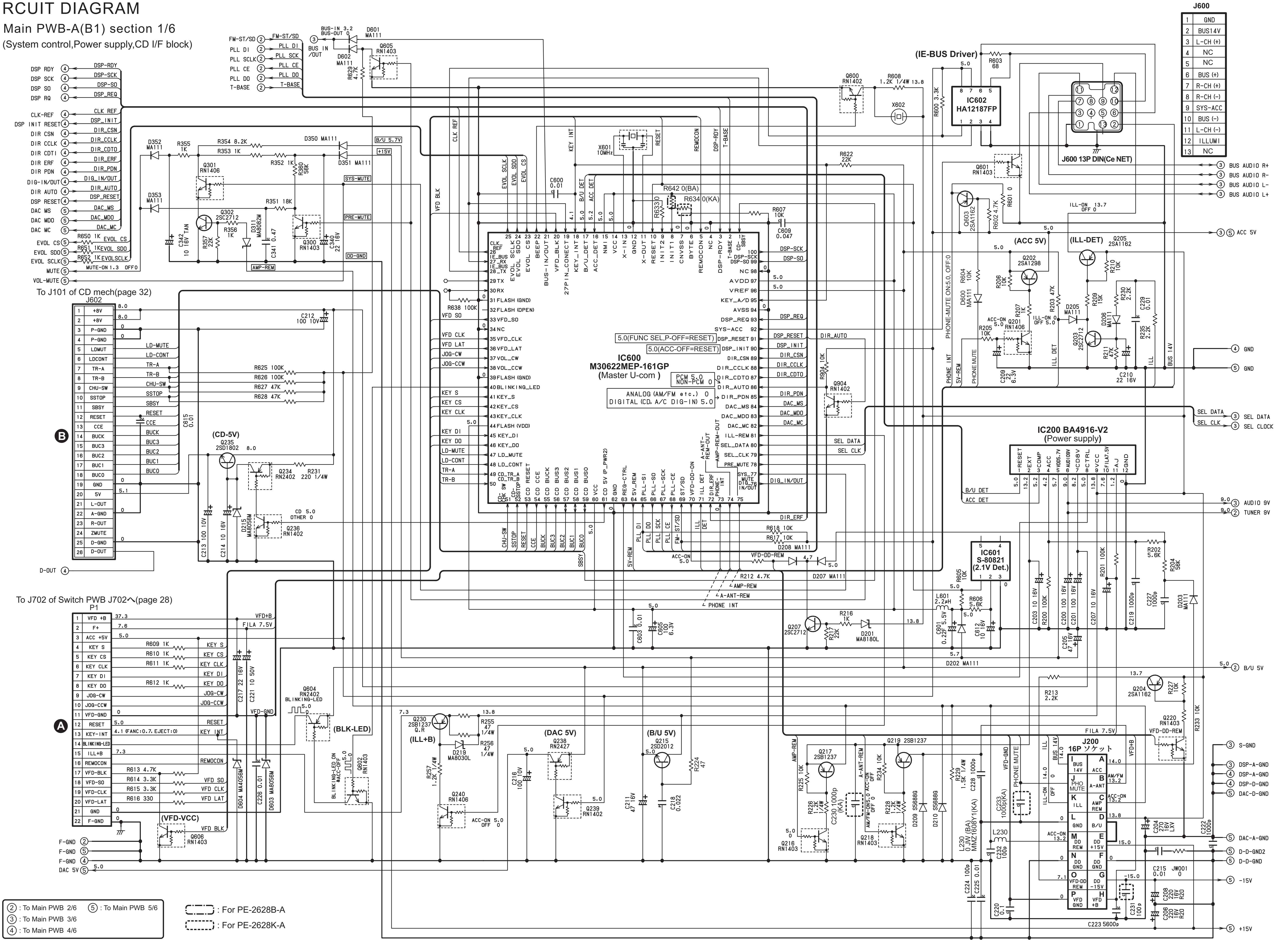
REF No.	PART No.	DESCRIPTION
Q1	060-4015-90	PS1192H
Q2	060-4015-90	PS1192H
S1	013-7414-50	CHUCKING

REF No.	PART No.	DESCRIPTION
S2	013-7413-50	LIMIT
PWB	039-1944-21	PWB(WITHOUT COMPONENT)

CIRCUIT DIAGRAM

Main PWB-A(B1) section 1/6

(System control,Power supply,CD I/F block)

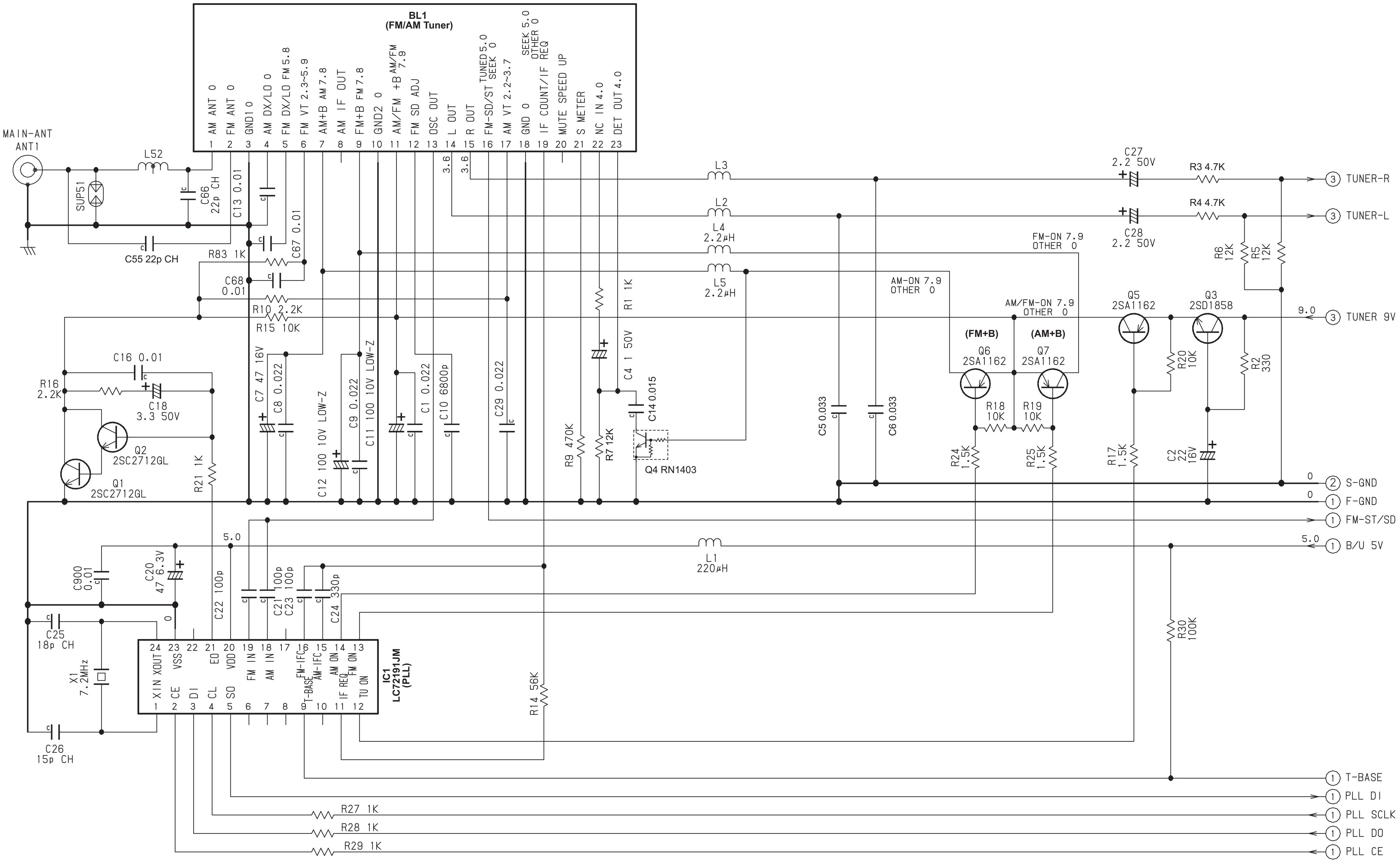

J600
1 GND
2 BUS14V
3 L-CH (+)
4 NC
5 NC
6 BUS (+)
7 R-CH (+)
8 R-CH (−)
9 SYS-ACC
10 BUS (−)
11 L-CH (−)
12 ILLUMI
13 NC
J600 13P DIN(Ce NET)
(IE-BUS Driver)
IC602
HA12187FP
X601 10MHz
X602
IC600
M30622MEP-161GP
(Master U-com)
5.0(FUNC SEL,P-OFF=RESET)
5.0(ACC-OFF=RESET)
PCM 5.0 NON-PCM 0
ANALOG (AM/FM etc.) 0
DIGITAL (CD, A/C DIG-IN) 5.0
IC200 BA4916-V2
(Power supply)
IC601
S-80821
(2.1V Det.)
(ACC 5V)
(ILL-DET)
(CD-5V)
(BLK-LED)
(ILL+B)
(DAC 5V)
(B/U 5V)
(VFD-VCC)
To J101 of CD mech(page 32)
J602
B
To J702 of Switch PWB J702へ(page 28)
P1
A
J200
16P ソケット
BUS AUDIO R+
BUS AUDIO R-
BUS AUDIO L-
BUS AUDIO L+
ACC 5V
GND
SEL DATA
SEL CLOCK
AUDIO 9V
TUNER 9V
B/U 5V
S-GND
DSP-A-GND
DSP-D-GND
DAC-D-GND
DAC-A-GND
D-D-GND2
D-D-GND
-15V
+15V
F-GND
DAC 5V
D-OUT

②: To Main PWB 2/6 ⑤: To Main PWB 5/6
③: To Main PWB 3/6
④: To Main PWB 4/6

▭ : For PE-2628B-A
▭ : For PE-2628K-A

Main PWB-A(B1) section 2/6

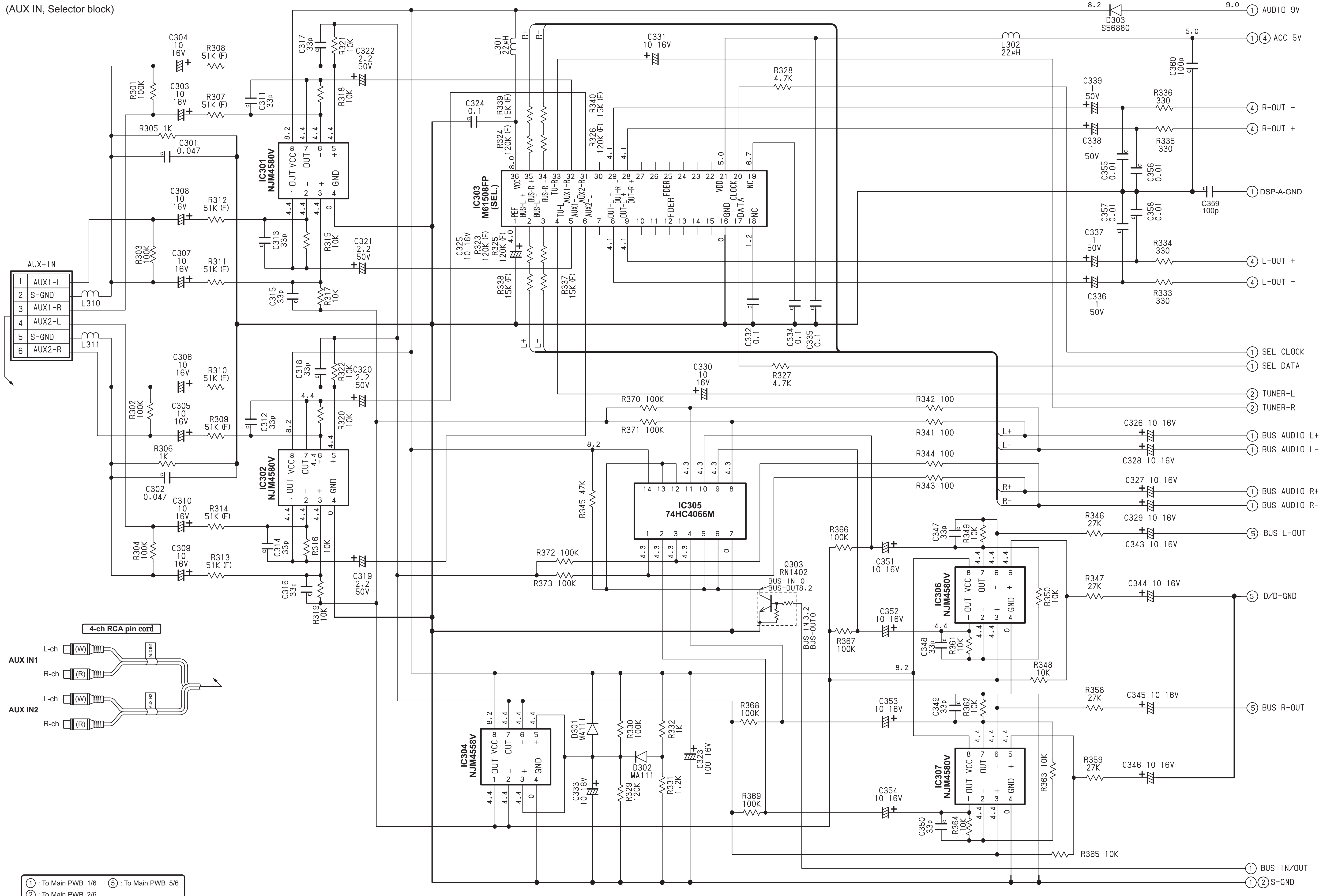
(Tuner block)


BL1
(FM/AM Tuner)
1 AM ANT 0
2 FM ANT 0
3 GND1 0
4 AM DX/LO 0
5 FM DX/LO FM 5.8
6 FM VT 2.3~5.9
7 AM+B AM 7.8
8 AM IF OUT
9 FM+B FM 7.8
10 GND2 0
11 AM/FM +B AM/FM 7.9
12 FM SD ADJ
13 OSC OUT
14 L OUT
15 R OUT
16 FM-SD/ST TUNED 5.0 SEEK 0
17 AM VT 2.2~3.7
18 GND 0
19 IF COUNT/IF REQ SEEK 5.0 OTHER 0
20 MUTE SPEED UP
21 S METER
22 NC IN 4.0
23 DET OUT 4.0
3.6
3.6
MAIN-ANT
ANT1
L52
SUP51
C66 22p CH
C13 0.01
C55 22p CH
C67 0.01
R83 1K
C68 0.01
R10 2.2K
R15 10K
C16 0.01
R16 2.2K
C18 3.3 50V
Q2 2SC2712GL
Q1 2SC2712GL
R21 1K
C7 47 16V
C8 0.022
C12 100 10V LOW-Z
C9 0.022
C11 100 10V LOW-Z
C1 0.022
C10 6800p
C29 0.022
R9 470K
R7 12K
R1 1K
C4 1 50V
C14 0.015
Q4 RN1403
L3
L2
L4 2.2µH
L5 2.2µH
C5 0.033
C6 0.033
C27 2.2 50V
C28 2.2 50V
R3 4.7K
R4 4.7K
R6 12K
R5 12K
FM-ON 7.9 OTHER 0
AM-ON 7.9 OTHER 0
AM/FM-ON 7.9 OTHER 0
(FM+B)
Q6 2SA1162
(AM+B)
Q7 2SA1162
Q5 2SA1162
Q3 2SD1858
R18 10K
R19 10K
R24 1.5K
R25 1.5K
R20 10K
R17 1.5K
R2 330
C2 22 16V
9.0
③ TUNER-R
③ TUNER-L
③ TUNER 9V
0
② S-GND
0
① F-GND
① FM-ST/SD
5.0
① B/U 5V
L1 220µH
5.0
C900 0.01
C20 47 6.3V
0
C22 100p
C21 100p
C23 100p
C24 330p
C25 18p CH
X1 7.2MHz
C26 15p CH
R30 100K
R14 56K
IC1 LC72191JM (PLL)
24 XOUT
23 VSS
22
21 EO
20 VDD
19 FM IN
18 AM IN
17
16 FM-IFC
15 AM-IFC
14 AM ON
13 FM ON
1 XIN
2 CE
3 DI
4 CL
5 SO
6
7
8
9 T-BASE
10
11 IF REQ
12 TU ON
R27 1K
R28 1K
R29 1K
① T-BASE
① PLL DI
① PLL SCLK
① PLL DO
① PLL CE

① : To Main PWB 1/6
② : To Main PWB 2/6
③ : To Main PWB 3/6

Main PWB-A(B1) section 3/6

(AUX IN, Selector block)

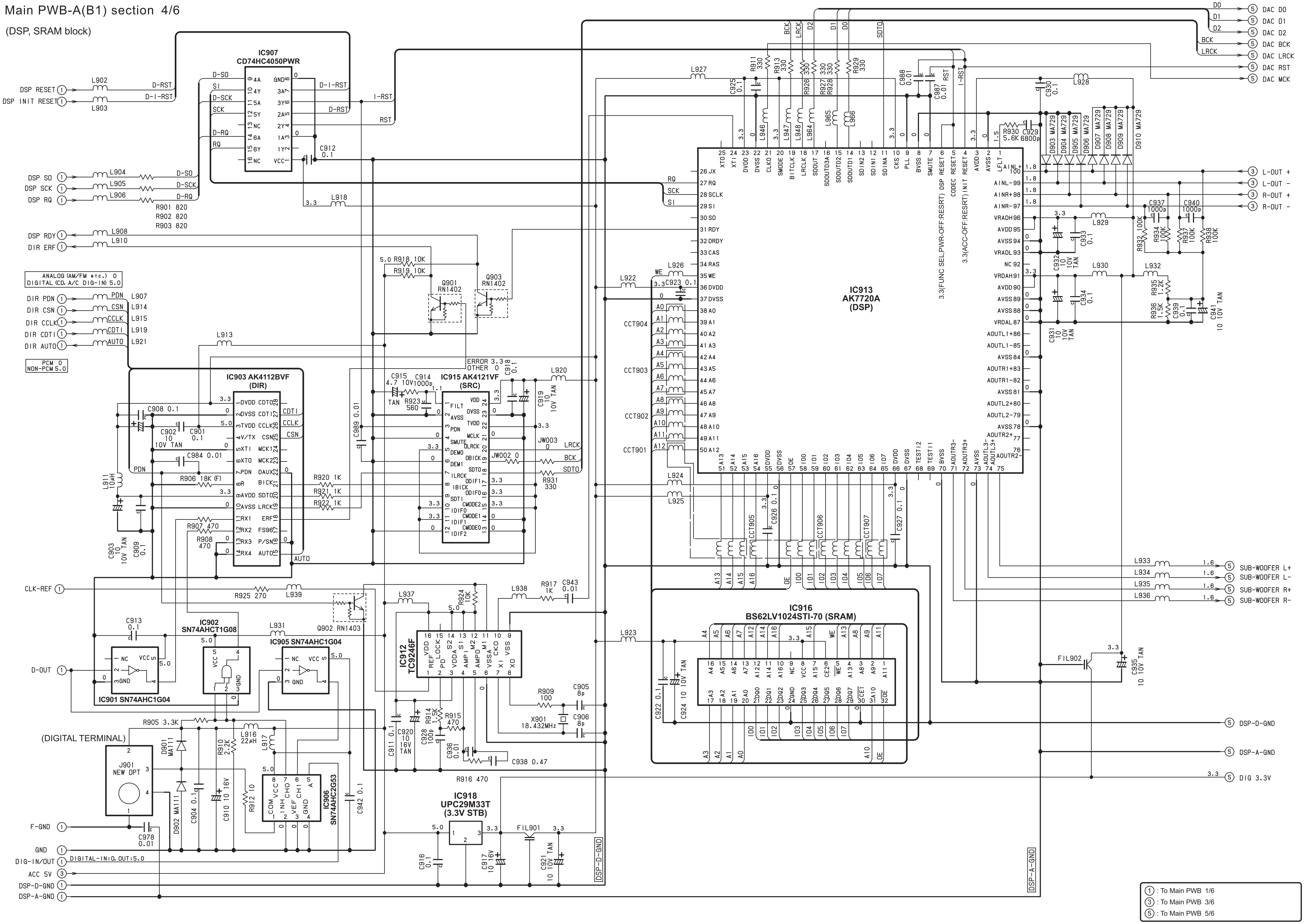


AUX-IN
1 AUX1-L
2 S-GND
3 AUX1-R
4 AUX2-L
5 S-GND
6 AUX2-R
L310
L311
4-ch RCA pin cord
AUX IN1
AUX IN2
L-ch (W)
R-ch (R)
C304 10 16V
R308 51K (F)
C303 10 16V
R307 51K (F)
R301 100K
R305 1K
C301 0.047
C308 10 16V
R312 51K (F)
C307 10 16V
R311 51K (F)
R303 100K
C317 33p
R321 10K
C322 2.2 50V
C311 33p
R318 10K
IC301 NJM4580V
C313 33p
R315 10K
C321 2.2 50V
C315 33p
R317 10K
C306 10 16V
R310 51K (F)
R302 100K
C305 10 16V
R309 51K (F)
R306 1K
C302 0.047
C310 10 16V
R314 51K (F)
R304 100K
C309 10 16V
R313 51K (F)
C318 33p
R322 10K
C320 2.2 50V
C312 33p
R320 10K
IC302 NJM4580V
C314 33p
R316 10K
C319 2.2 50V
C316 33p
R319 10K
L301 22μH
C324 0.1
R339 15K (F)
R324 120K (F)
R340 15K (F)
R326 120K (F)
C325 10 16V
R323 120K (F)
R325 120K (F)
R338 15K (F)
R337 15K (F)
IC303 M61508FP (SEL.)
C331 10 16V
R328 4.7K
C332 0.1
C334 0.1
C335 0.1
R327 4.7K
C330 10 16V
R370 100K
R371 100K
R342 100
R341 100
R344 100
R343 100
R345 47K
IC305 74HC4066M
R372 100K
R373 100K
Q303 RN1402
BUS-IN 0
BUS-OUT 8.2
BUS-IN 3.2
BUS-OUT 0
D303 S5688G
L302 22μH
C360 100p
C339 1 50V
R336 330
C338 1 50V
R335 330
C355 0.01
C356 0.01
C359 100p
C357 0.01
C358 0.01
C337 1 50V
R334 330
C336 1 50V
R333 330
C326 10 16V
C328 10 16V
C327 10 16V
C329 10 16V
R346 27K
C343 10 16V
C347 33p
R349 10K
R366 100K
C351 10 16V
IC306 NJM4580V
R350 10K
R347 27K
C344 10 16V
C352 10 16V
R367 100K
C348 33p
R361 10K
R348 10K
R358 27K
C345 10 16V
C349 33p
R362 10K
R368 100K
C353 10 16V
IC307 NJM4580V
R363 10K
R359 27K
C346 10 16V
R369 100K
C354 10 16V
C350 33p
R364 10K
R365 10K
IC304 NJM4558V
D301 MA111
R330 100K
R332 1K
C323 100 16V
D302 MA111
C333 10 16V
R329 120K
R331 1.2K
① AUDIO 9V
①④ ACC 5V
④ R-OUT −
④ R-OUT +
① DSP-A-GND
④ L-OUT +
④ L-OUT −
① SEL CLOCK
① SEL DATA
② TUNER-L
② TUNER-R
① BUS AUDIO L+
① BUS AUDIO L−
① BUS AUDIO R+
① BUS AUDIO R−
⑤ BUS L-OUT
⑤ D/D-GND
⑤ BUS R-OUT
① BUS IN/OUT
①② S-GND

① : To Main PWB 1/6
⑤ : To Main PWB 5/6
② : To Main PWB 2/6
④ : To Main PWB 4/6

Main PWB-A(B1) section 4/6

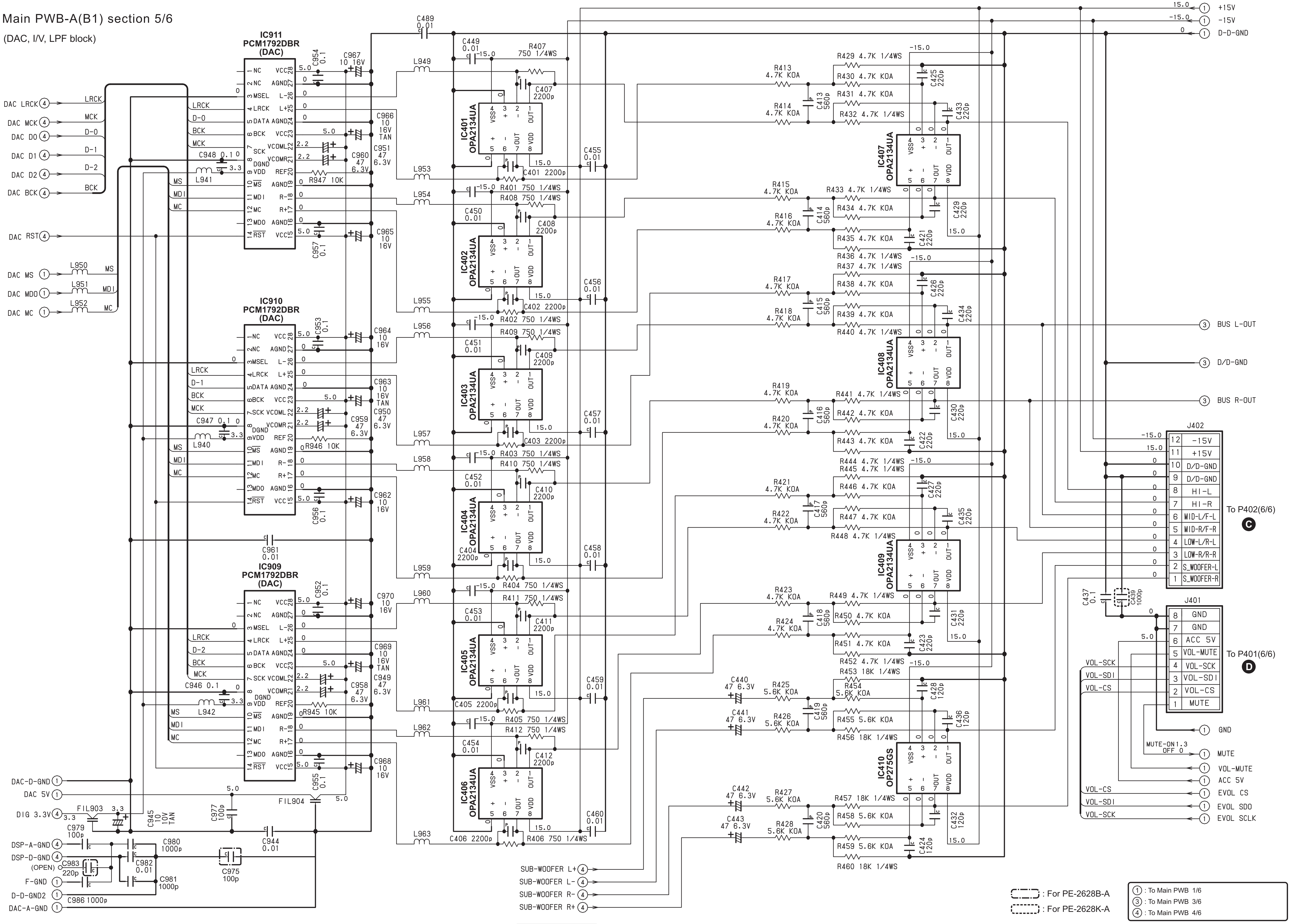
(DSP, SRAM block)


IC907
CD74HC4050PWR
IC913
AK7720A
(DSP)
IC903 AK4112BVF
(DIR)
IC915 AK4121VF
(SRC)
IC916
BS62LV1024STI-70 (SRAM)
IC912
TC9246F
IC901 SN74AHC1G04
IC902
SN74AHCT1G08
IC905 SN74AHC1G04
IC906
SN74AHC2G53
IC918
UPC29M33T
(3.3V STB)
J901
NEW OPT
(DIGITAL TERMINAL)
X901
18.432MHz
DSP RESET
DSP INIT RESET
DSP SO
DSP SCK
DSP RQ
DSP RDY
DIR ERF
ANALOG (AM/FM etc.) 0
DIGITAL (CD, A/C DIG-IN) 5.0
DIR PDN
DIR CSN
DIR CCLK
DIR CDTI
DIR AUTO
PCM 0
NON-PCM 5.0
CLK-REF
D-OUT
F-GND
GND
DIG-IN/OUT
DIGITAL-IN:0, OUT:5.0
ACC 5V
DSP-D-GND
DSP-A-GND
DAC D0
DAC D1
DAC D2
DAC BCK
DAC LRCK
DAC RST
DAC MCK
L-OUT +
L-OUT -
R-OUT +
R-OUT -
SUB-WOOFER L+
SUB-WOOFER L-
SUB-WOOFER R+
SUB-WOOFER R-
DSP-D-GND
DSP-A-GND
DIG 3.3V
ERROR 3.3
OTHER 0
3.3(FUNC SEL,PWR-OFF:RESRT) DSP RESET
3.3(ACC-OFF:RESRT) INIT RESET
CCT901
CCT902
CCT903
CCT904
CCT905
CCT906
CCT907
FIL901
FIL902
Q901 RN1402
Q902 RN1403
Q903 RN1402
D901 MA111
D902 MA111
D903 MA729
D904 MA729
D905 MA729
D906 MA729
D907 MA729
D908 MA729
D909 MA729
D910 MA729

①	: To Main PWB 1/6
③	: To Main PWB 3/6
⑤	: To Main PWB 5/6

Main PWB-A(B1) section 5/6

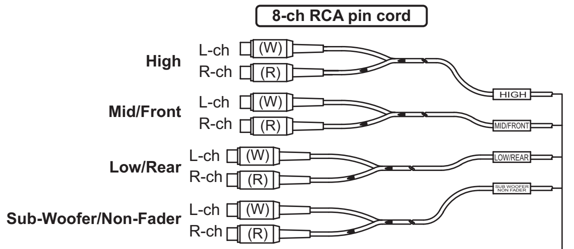
(DAC, I/V, LPF block)

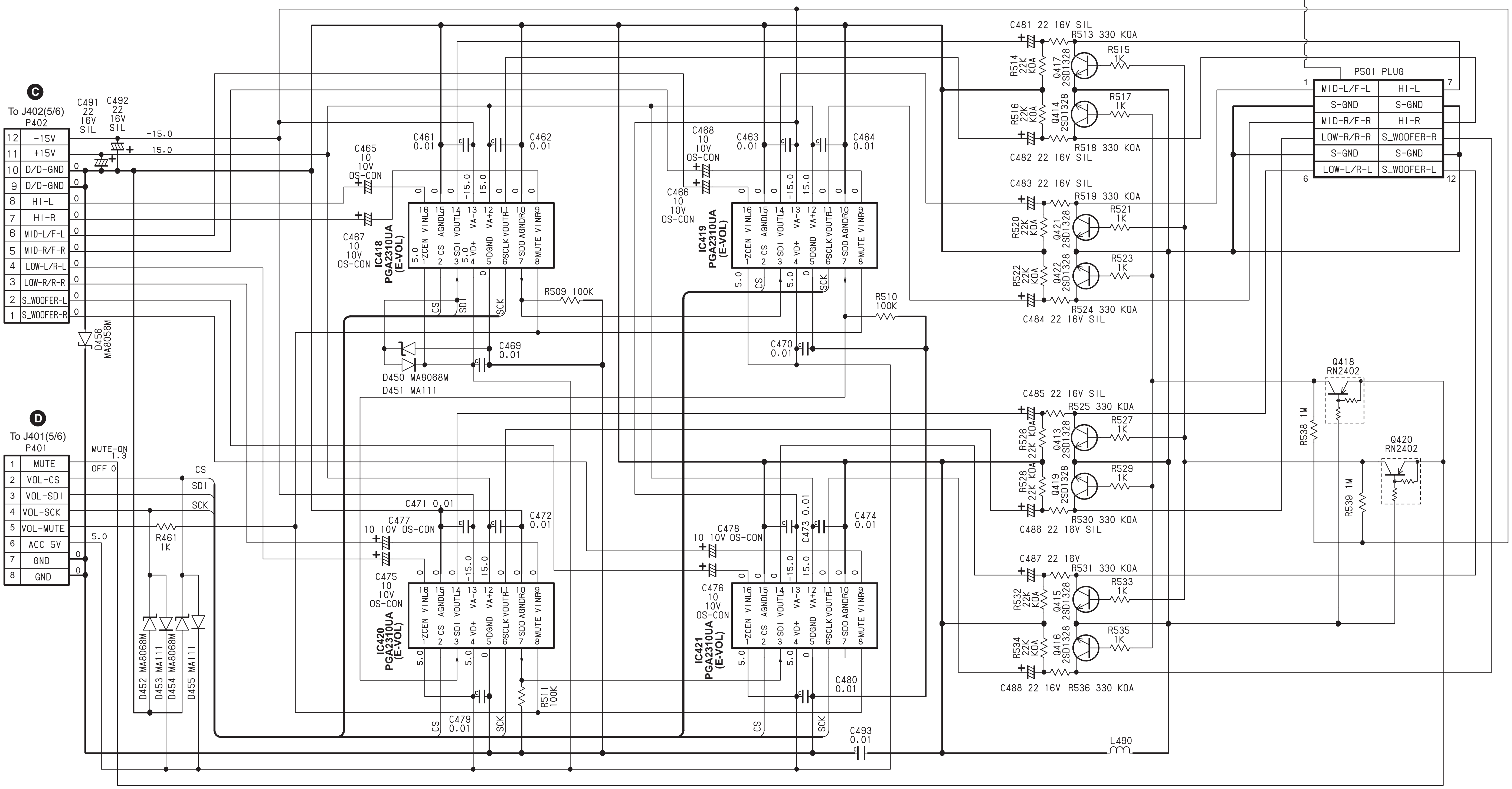

IC911
PCM1792DBR
(DAC)
IC910
PCM1792DBR
(DAC)
IC909
PCM1792DBR
(DAC)
IC401
OPA2134UA
IC402
OPA2134UA
IC403
OPA2134UA
IC404
OPA2134UA
IC405
OPA2134UA
IC406
OPA2134UA
IC407
OPA2134UA
IC408
OPA2134UA
IC409
OPA2134UA
IC410
OP275GS
DAC LRCK ④
DAC MCK ④
DAC D0 ④
DAC D1 ④
DAC D2 ④
DAC BCK ④
DAC RST ④
DAC MS ①
DAC MDO ①
DAC MC ①
DAC-D-GND ①
DAC 5V ①
DIG 3.3V ④
DSP-A-GND ④
DSP-D-GND ④
(OPEN)
F-GND ①
D-D-GND2 ①
DAC-A-GND ①
FIL903
FIL904
+15V ①
-15V ①
D-D-GND ①
BUS L-OUT ③
D/D-GND ③
BUS R-OUT ③
J402
12 -15V
11 +15V
10 D/D-GND
9 D/D-GND
8 HI-L
7 HI-R
6 MID-L/F-L
5 MID-R/F-R
4 LOW-L/R-L
3 LOW-R/R-R
2 S_WOOFER-L
1 S_WOOFER-R
To P402(6/6)
C
J401
8 GND
7 GND
6 ACC 5V
5 VOL-MUTE
4 VOL-SCK
3 VOL-SDI
2 VOL-CS
1 MUTE
To P401(6/6)
D
GND ①
MUTE-ON 1.3
OFF 0
MUTE ①
VOL-MUTE ①
ACC 5V ①
EVOL CS ①
EVOL SDO ①
EVOL SCLK ①
SUB-WOOFER L+ ④
SUB-WOOFER L- ④
SUB-WOOFER R- ④
SUB-WOOFER R+ ④
: For PE-2628B-A
: For PE-2628K-A
① : To Main PWB 1/6
③ : To Main PWB 3/6
④ : To Main PWB 4/6

Main PWB-B(B1) section 6/6

(E-VOL, RCA Line out block)

MODE		
MULTI	STD	DRCT
HI	HI-FRONT	——
MID	LOW-FRONT	FRONT
LOW	REAR	REAR
SUB-WOOFER	SUB-WOOFER	NON-FADER

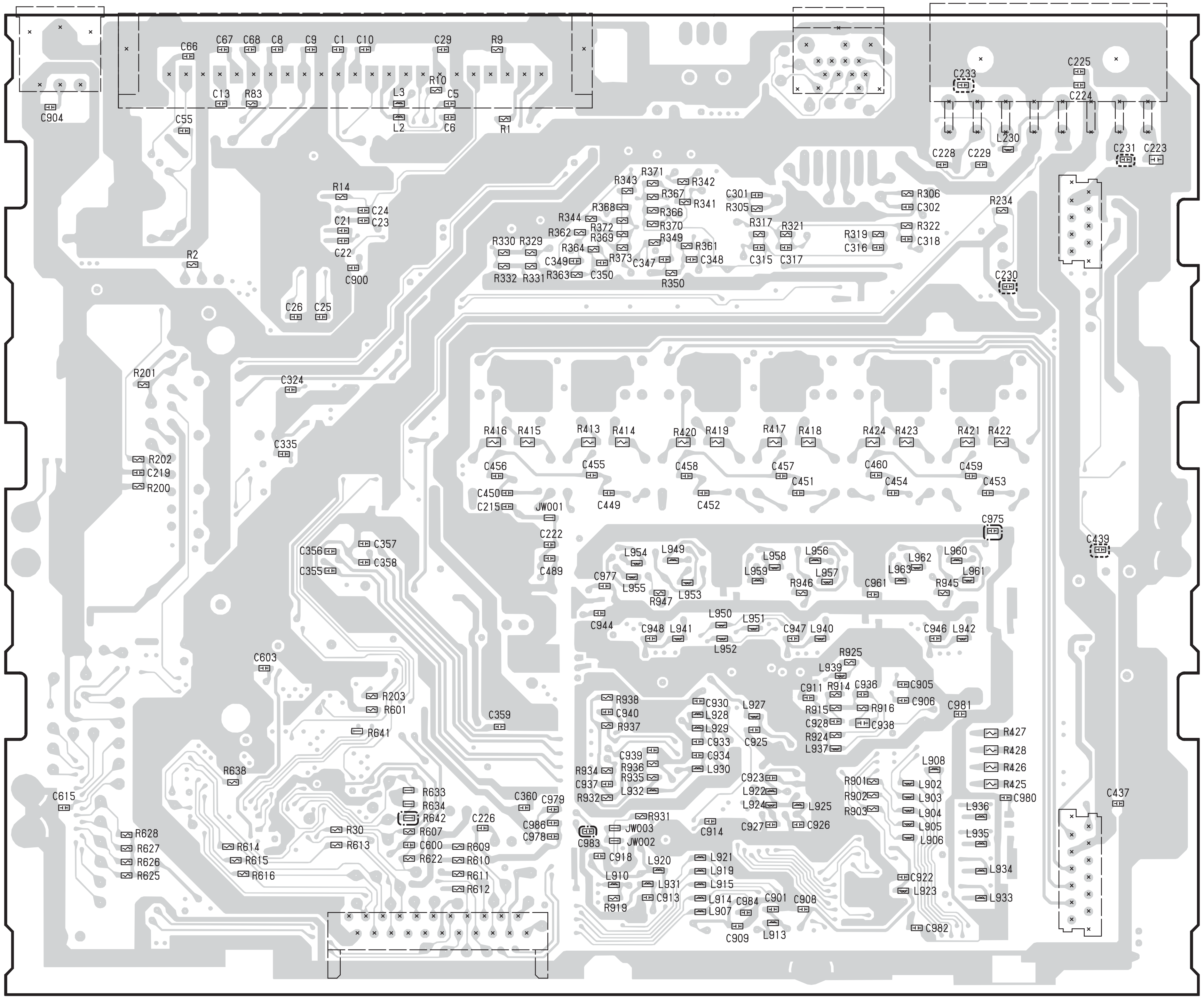

8-ch RCA pin cord
High
Mid/Front
Low/Rear
Sub-Woofer/Non-Fader
L-ch (W)
R-ch (R)
HIGH
MID/FRONT
LOW/REAR
S.W/NON-FADER


C
To J402(5/6)
P402
12 -15V
11 +15V
10 D/D-GND
9 D/D-GND
8 HI-L
7 HI-R
6 MID-L/F-L
5 MID-R/F-R
4 LOW-L/R-L
3 LOW-R/R-R
2 S_WOOFER-L
1 S_WOOFER-R
C491 22 16V SIL
C492 22 16V SIL
-15.0
15.0
D456 MA8068M
D
To J401(5/6)
P401
1 MUTE
2 VOL-CS
3 VOL-SDI
4 VOL-SCK
5 VOL-MUTE
6 ACC 5V
7 GND
8 GND
MUTE-ON 1.3
OFF 0
5.0
CS
SDI
SCK
R461 1K
D452 MA8068M
D453 MA111
D454 MA8068M
D455 MA111
C461 0.01
C462 0.01
C463 0.01
C464 0.01
C465 10 10V OS-CON
C466 10 10V OS-CON
C467 10 10V OS-CON
C468 10 10V OS-CON
IC418 PGA2310UA (E-VOL)
IC419 PGA2310UA (E-VOL)
IC420 PGA2310UA (E-VOL)
IC421 PGA2310UA (E-VOL)
16 VINL
15 AGNDL
14 VOUTL
13 VA-
12 VA+
11 VOUTR
10 AGNDR
9 VINR
1 ZCEN
2 CS
3 SDI
4 VD+
5 DGND
6 SCLK
7 SDO
8 MUTE
R509 100K
R510 100K
R511 100K
C469 0.01
C470 0.01
D450 MA8068M
D451 MA111
C471 0.01
C472 0.01
C473 0.01
C474 0.01
C475 10 10V OS-CON
C476 10 10V OS-CON
C477 10 10V OS-CON
C478 10 10V OS-CON
C479 0.01
C480 0.01
C493 0.01
L490
C481 22 16V SIL
C482 22 16V SIL
C483 22 16V SIL
C484 22 16V SIL
C485 22 16V SIL
C486 22 16V SIL
C487 22 16V
C488 22 16V
R513 330 KOA
R514 22K KOA
R515 1K
R516 22K KOA
R517 1K
R518 330 KOA
R519 330 KOA
R520 22K KOA
R521 1K
R522 22K KOA
R523 1K
R524 330 KOA
R525 330 KOA
R526 22K KOA
R527 1K
R528 22K KOA
R529 1K
R530 330 KOA
R531 330 KOA
R532 22K KOA
R533 1K
R534 22K KOA
R535 1K
R536 330 KOA
Q413 2SD1328
Q414 2SD1328
Q415 2SD1328
Q416 2SD1328
Q417 2SD1328
Q419 2SD1328
Q421 2SD1328
Q422 2SD1328
Q418 RN2402
Q420 RN2402
R538 1M
R539 1M
P501 PLUG
1 MID-L/F-L
HI-L 7
S-GND
S-GND
MID-R/F-R
HI-R
LOW-R/R-R
S_WOOFER-R
S-GND
S-GND
6 LOW-L/R-L
S_WOOFER-L 12

PRINTED WIRING BOARD

Main PWB(B1) section 1/2

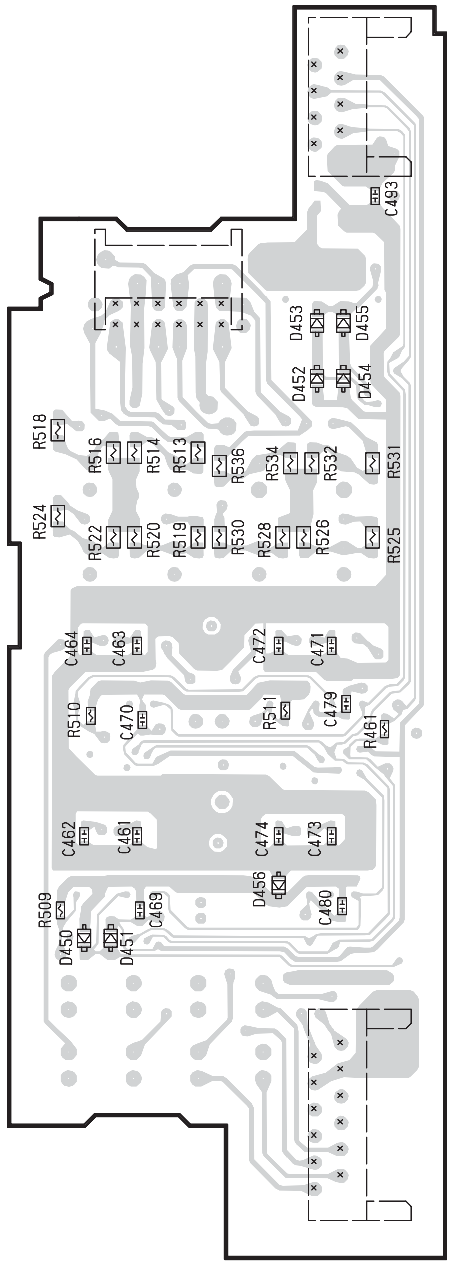
Caution:
COMPONENT SIDE: Parts on the component side seen from the component side are indicated.
SOLDER SIDE: Parts on the solder side seen from the the solder side are indicated.



C904
C66
C67
C68
C8
C9
C1
C10
C29
R9
C13
R83
C55
L3
R10
C5
L2
C6
R1
C233
C225
C224
C228
C229
L230
C231
C223
R14
C24
C23
C21
C22
C900
R2
C26
C25
R371
R343
R342
R367
R341
R368
R366
R344
R370
R362
R372
R369
R349
R364
R373
C347
R361
C348
R330
R329
C349
R363
C350
R332
R331
R350
C301
R305
R317
R321
C315
C317
R319
C316
R306
C302
R322
C318
R234
C230
R201
C324
C335
R202
C219
R200
R416
R415
R413
R414
R420
R419
R417
R418
R424
R423
R421
R422
C456
C455
C458
C457
C460
C459
C450
C215
JW001
C449
C452
C451
C454
C453
C975
C222
C489
C439
C356
C357
C355
C358
L954
L949
L958
L956
L962
L960
C977
L955
R947
L953
L959
L957
R946
C961
L963
R945
L961
C944
L950
L951
C948
L941
C947
L940
C946
L942
L952
R925
C603
L939
C911
R914
C936
C905
R203
R601
R938
C940
R937
C930
L928
L929
C933
C934
L930
L927
C925
R915
C928
C938
R916
C906
C981
R924
L937
R641
C359
R427
R428
R426
R425
C980
R638
C939
R936
R935
R934
C937
L932
R932
C923
L922
L924
L925
C927
C926
R901
R902
R903
L908
L902
L903
L904
L905
L906
L936
L935
L934
L933
C437
C615
R633
R634
R642
R607
C600
R622
C226
R609
R610
R611
R612
C360
C979
C986
C978
R931
JW003
JW002
C983
C918
C914
R628
R627
R626
R625
R614
R615
R616
R30
R613
L920
L910
L931
C913
R919
L921
L919
L915
L914
C984
L907
C901
C908
C909
L913
C922
L923
C982

Main PWB-A (B1)

SOLDER SIDE



C493
D453
D455
D452
D454
R518
R516
R514
R513
R536
R534
R532
R531
R524
R522
R520
R519
R530
R528
R526
R525
C464
C463
C472
C471
R510
C470
R511
C479
R461
C462
C461
C474
C473
R509
D450
D451
C469
D456
C480

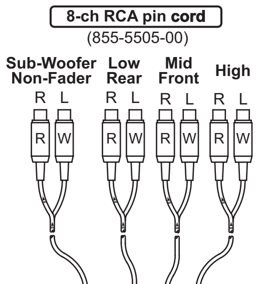
Main PWB-B (B1)

SOLDER SIDE

⬚ : For PE-2628B-A

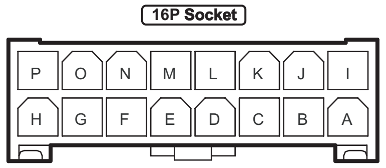
⬚ : For PE-2628K-A

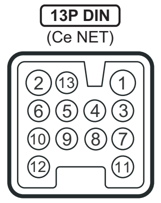
Main PWB(B1) section 2/2


8-ch RCA pin cord
(855-5505-00)
Sub-Woofer Non-Fader
Low Rear
Mid Front
High
R L
R W

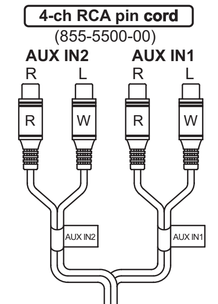
Refer to Printed wiring board of DC/DC PWB section(page 31).

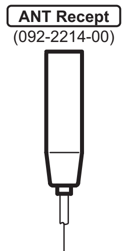
A	ACC	I	BUS 14V
B	A-ANT REMO	J	PHONE MUTE
C	AMP REMO	K	ILLUMI
D	B/U 14V	L	GND
E	DD +15V	M	DD REMO
F	DD GND	N	DD GND
G	DD -15V	O	VFD REMO
H	VFD +B	P	VFD GND

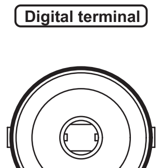

16P Socket
P O N M L K J I
H G F E D C B A

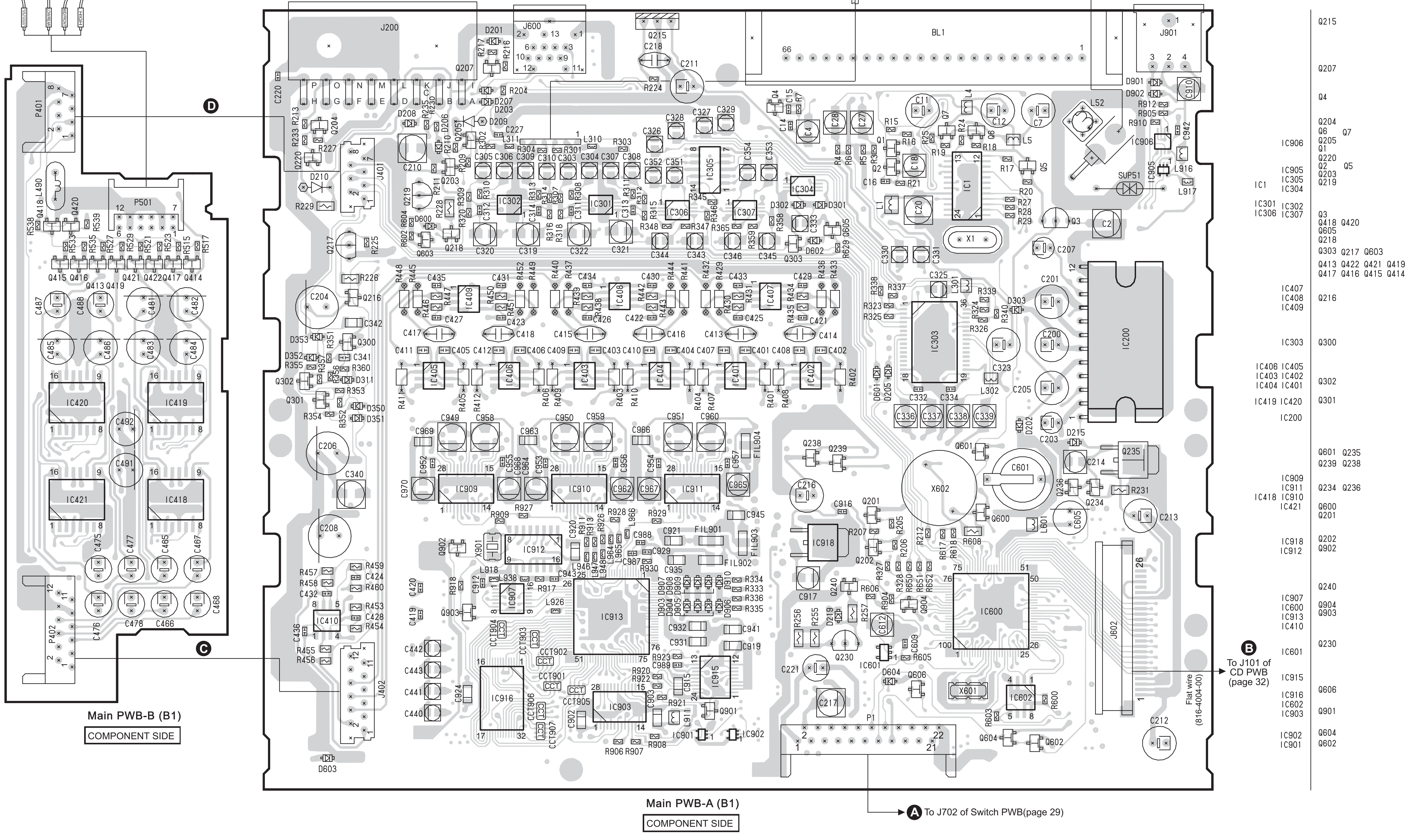

13P DIN
(Ce NET)
2 13 1
6 5 4 3
10 9 8 7
12 11

1	GND	8	R-CH(-)
2	B/U 14V	9	SYS-ACC
3	L-CH(+)	10	BUS(-)
4	NC	11	L-CH(-)
5	NC	12	ILLUMI
6	BUS(+)	13	NC
7	R-CH(+)		


4-ch RCA pin cord
(855-5500-00)
AUX IN2
AUX IN1
R L
R W
AUX IN2
AUX IN1


ANT Recept
(092-2214-00)


Digital terminal

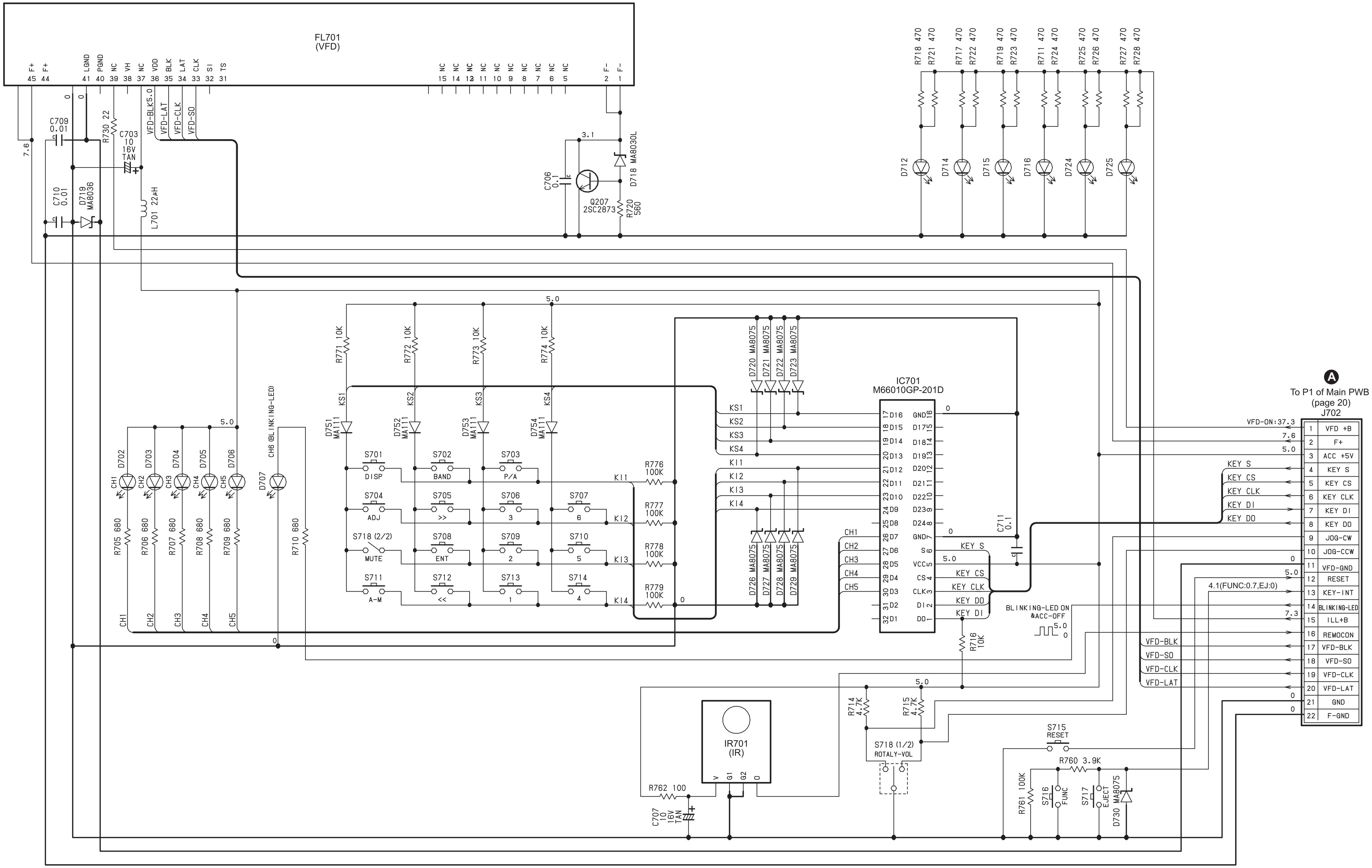

J200
J600
BL1
J901
P401
P501
P402
J401
J402
J602
P1
IC200
IC303
IC600
IC913
IC420
IC419
IC421
IC418
X1
X602
X601
D
C
B
To J101 of CD PWB (page 32)
Flat wire (816-4004-00)
A
To J702 of Switch PWB(page 29)
Main PWB-B (B1)
COMPONENT SIDE
Q215
Q207
Q4
IC906 Q204 Q6 Q7 Q205 Q1 Q220
IC1 IC905 IC305 IC304 Q2 Q5 Q203 Q219
IC301 IC306 IC302 IC307 Q3 Q418 Q420 Q605 Q218
Q303 Q217 Q603
Q413 Q422 Q421 Q419
Q417 Q416 Q415 Q414
IC407 IC408 IC409 Q216
IC303 Q300
IC406 IC405 IC403 IC402 IC404 IC401 Q302
IC419 IC420 Q301
IC200
Q601 Q235
Q239 Q238
IC909 IC911 IC418 IC910 IC421 Q234 Q236 Q600 Q201
IC918 IC912 Q202 Q902
Q240
IC907 IC600 IC913 IC410 Q904 Q903
IC601 Q230
IC915
IC916 IC602 IC903 Q606 Q901
IC902 IC901 Q604 Q602

Main PWB-A (B1)

COMPONENT SIDE

CIRCUIT DIAGRAM

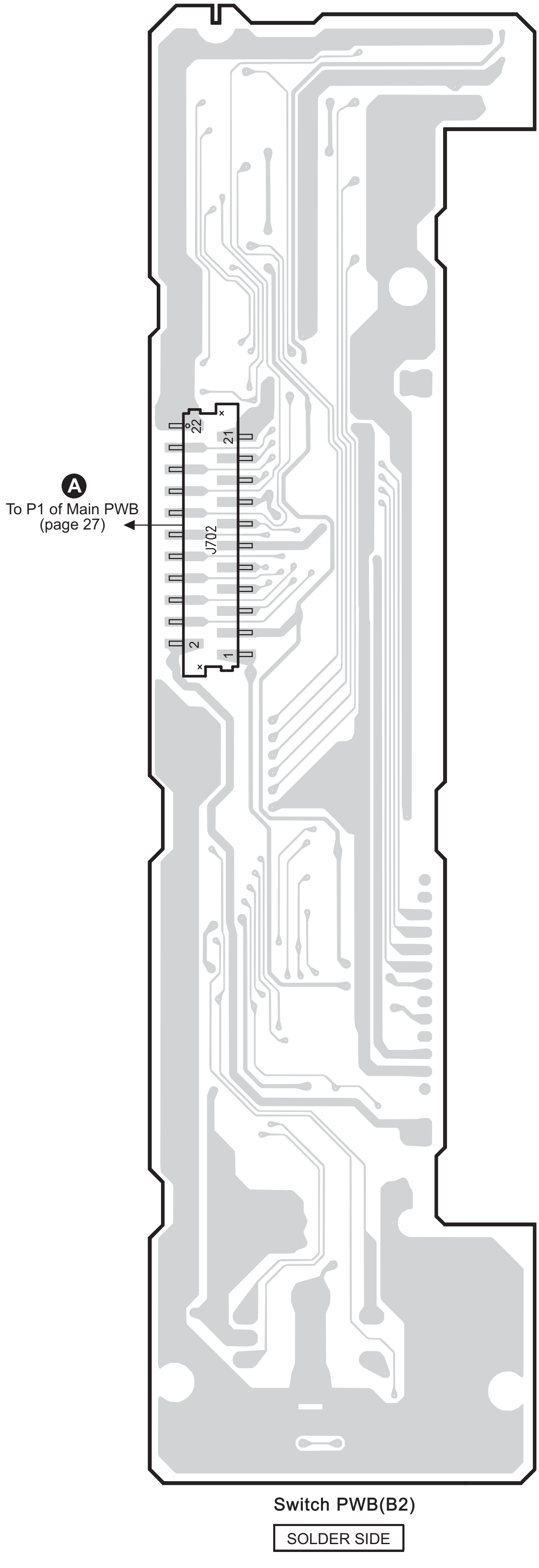
Switch PWB(B2) section



FL701
(VFD)
F+ 45
F+ 44
LGND 41
PGND 40
NC 39
VH 38
NC 37
VDD 36
BLK 35
LAT 34
CLK 33
SI 32
TS 31
NC 15
NC 14
NC 13
NC 11
NC 10
NC 9
NC 8
NC 7
NC 6
NC 5
F- 2
F- 1
VFD-BLK5.0
VFD-LAT
VFD-CLK
VFD-SO
C709 0.01
R730 22
C703 10 16V TAN
7.6
C710 0.01
D719 MA8036
L701 22μH
3.1
C706 0.1
Q207 2SC2873
D718 MA8030L
R720 560
R718 470
R721 470
R717 470
R722 470
R719 470
R723 470
R711 470
R724 470
R725 470
R726 470
R727 470
R728 470
D712
D714
D715
D716
D724
D725
5.0
R771 10K
R772 10K
R773 10K
R774 10K
KS1
KS2
KS3
KS4
D751 MA111
D752 MA111
D753 MA111
D754 MA111
S701 DISP
S702 BAND
S703 P/A
S704 ADJ
S705 >>
S706 3
S707 6
S718 (2/2) MUTE
S708 ENT
S709 2
S710 5
S711 A-M
S712 <<
S713 1
S714 4
KI1
KI2
KI3
KI4
R776 100K
R777 100K
R778 100K
R779 100K
D720 MA8075
D721 MA8075
D722 MA8075
D723 MA8075
D726 MA8075
D727 MA8075
D728 MA8075
D729 MA8075
IC701
M66010GP-201D
D16 17
D15 18
D14 19
D13 20
D12 21
D11 22
D10 23
D9 24
D8 25
D7 26
D6 27
D5 28
D4 29
D3 30
D2 31
D1 32
GND 16
D17 15
D18 14
D19 13
D20 12
D21 11
D22 10
D23 9
D24 8
GND 7
S 6
VCC 5
CS 4
CLK 3
DI 2
DO 1
CH1
CH2
CH3
CH4
CH5
D702
D703
D704
D705
D706
D707
CH6 (BLINKING-LED)
R705 680
R706 680
R707 680
R708 680
R709 680
R710 680
C711 0.1
KEY S
KEY CS
KEY CLK
KEY DO
KEY DI
R716 10K
BLINKING-LED ON &ACC-OFF
5.0
0
4.1(FUNC:0.7,EJ:0)
IR701 (IR)
V G1 G2 O
R762 100
C707 10 16V TAN
R714 4.7K
R715 4.7K
S718 (1/2) ROTALY-VOL
S715 RESET
R760 3.9K
R761 100K
S716 FUNC
S717 EJECT
D730 MA8075
VFD-BLK
VFD-SO
VFD-CLK
VFD-LAT
Ⓐ
To P1 of Main PWB
(page 20)
J702
VFD-ON:37.3
7.6
5.0
7.3
1 VFD +B
2 F+
3 ACC +5V
4 KEY S
5 KEY CS
6 KEY CLK
7 KEY DI
8 KEY DO
9 JOG-CW
10 JOG-CCW
11 VFD-GND
12 RESET
13 KEY-INT
14 BLINKING-LED
15 ILL+B
16 REMOCON
17 VFD-BLK
18 VFD-SO
19 VFD-CLK
20 VFD-LAT
21 GND
22 F-GND

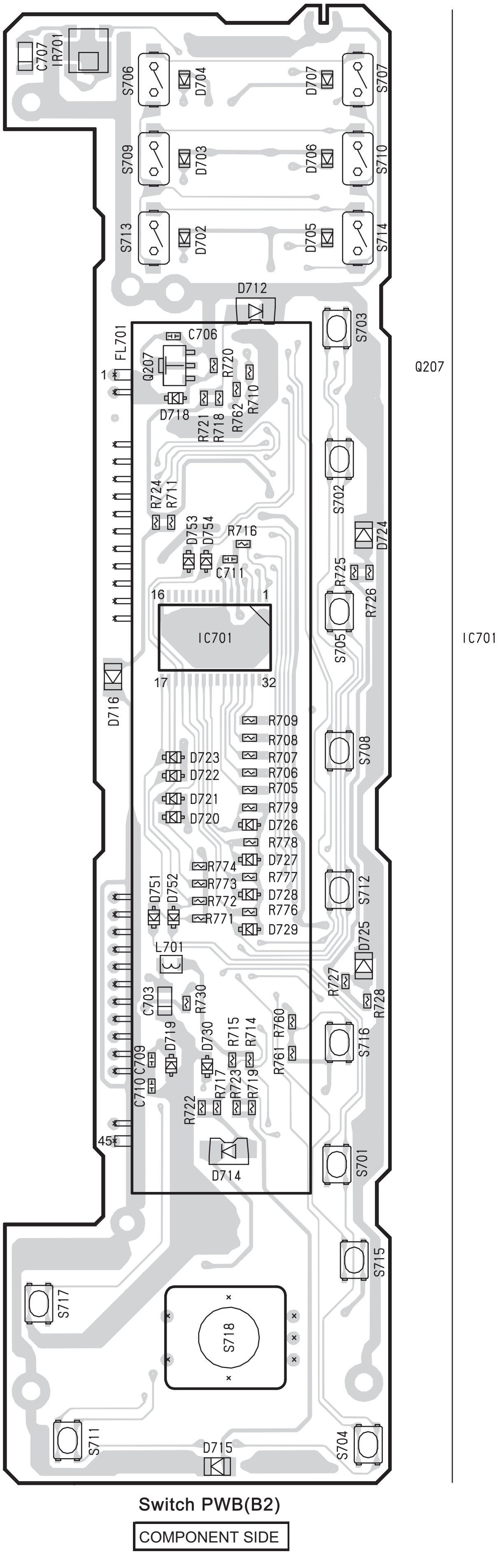
PRINTED WIRING BOARD

Switch PWB(B2) section


22
21
J702
2
1
A
To P1 of Main PWB
(page 27)

Switch PWB(B2)

SOLDER SIDE

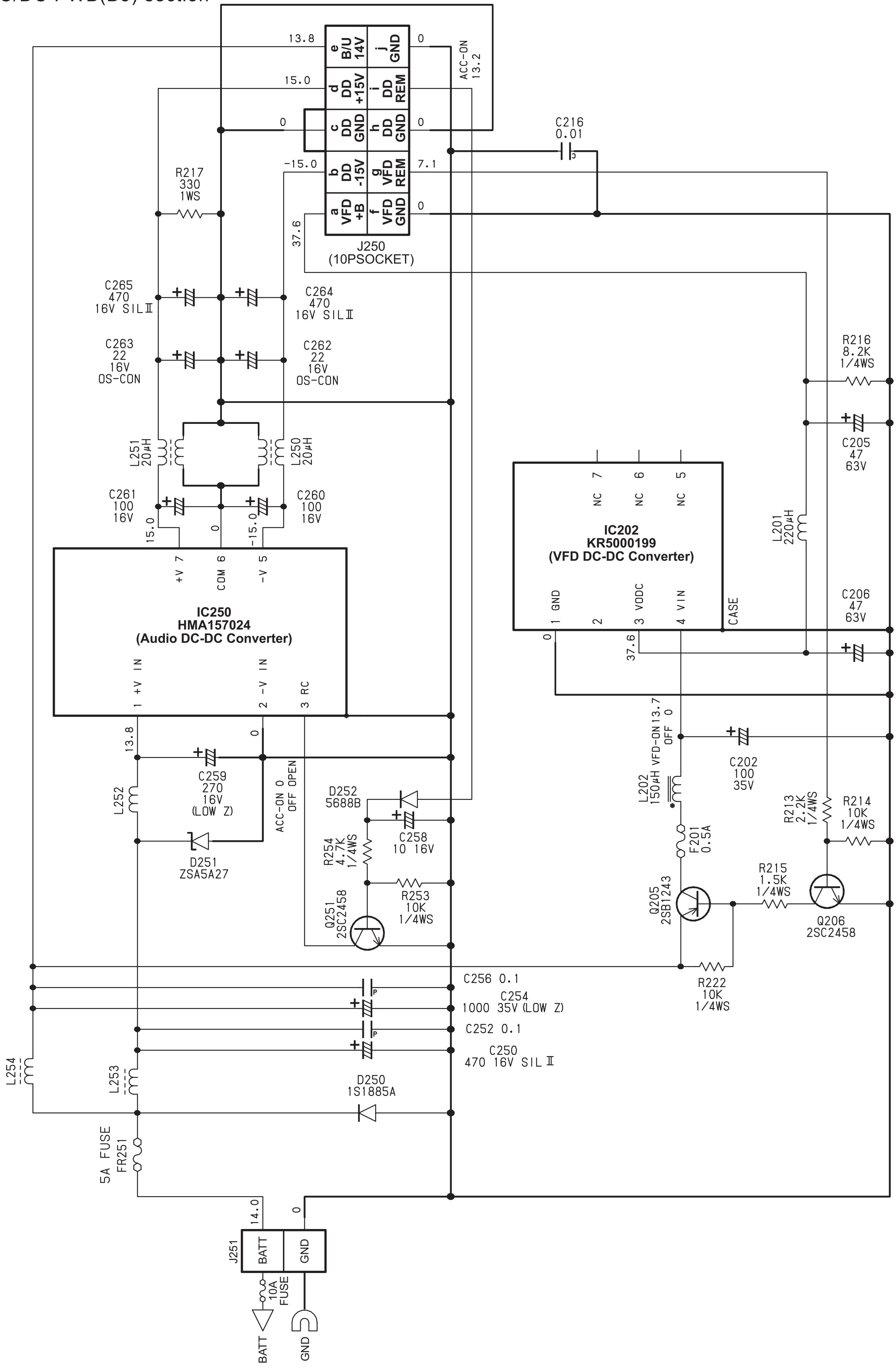

C707
IR701
S706
D704
D707
S707
S709
D703
D706
S710
S713
D702
D705
S714
D712
C706
FL701
1
Q207
R720
R710
D718
R721
R718
R762
S703
Q207
S702
R724
R711
D753
D754
R716
C711
D724
R725
R726
16
1
IC701
S705
IC701
17
32
D716
R709
R708
D723
R707
D722
R706
R705
D721
R779
D720
D726
R778
R774
D727
R773
R777
D751
D752
R772
D728
S712
R771
R776
D729
L701
D725
R727
C703
R730
R728
D719
R760
D730
R715
R714
S716
C709
R761
C710
R717
R723
R719
R722
45
D714
S701
S715
S717
S718
S711
S704
D715

Switch PWB(B2)

COMPONENT SIDE

CIRCUIT DIAGRAM

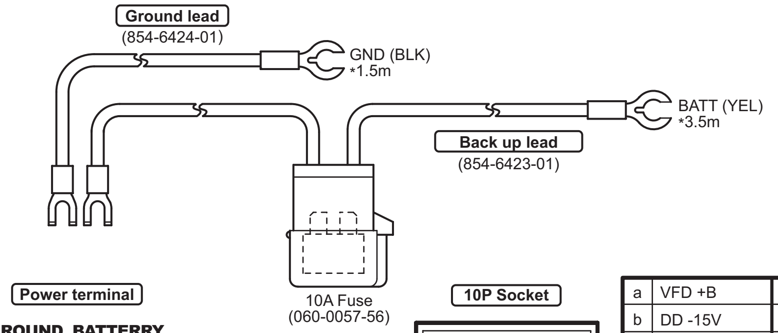
DC/DC PWB(B3) section



J250
(10PSOCKET)
e B/U 14V
j GND
d DD +15V
i DD REM
c DD GND
h DD GND
b DD -15V
g VFD REM
a VFD +B
f VFD GND
13.8
15.0
0
-15.0
37.6
7.1
ACC-ON 13.2
C216 0.01
R217 330 1WS
C265 470 16V SIL II
C264 470 16V SIL II
C263 22 16V OS-CON
C262 22 16V OS-CON
L251 20μH
L250 20μH
C261 100 16V
C260 100 16V
IC250
HMA157024
(Audio DC-DC Converter)
+V 7
COM 6
-V 5
1 +V IN
2 -V IN
3 RC
C259 270 16V (LOW Z)
L252
D251 ZSA5A27
ACC-ON 0 OFF OPEN
D252 5688B
C258 10 16V
R254 4.7K 1/4WS
R253 10K 1/4WS
Q251 2SC2458
IC202
KR5000199
(VFD DC-DC Converter)
NC 7
NC 6
NC 5
1 GND
2
3 VODC
4 VIN
CASE
R216 8.2K 1/4WS
C205 47 63V
L201 220μH
C206 47 63V
VFD-ON 13.7 OFF 0
C202 100 35V
L202 150μH
F201 0.5A
R213 2.2K 1/4WS
R214 10K 1/4WS
R215 1.5K 1/4WS
Q205 2SB1243
Q206 2SC2458
R222 10K 1/4WS
C256 0.1
C254 1000 35V (LOW Z)
C252 0.1
C250 470 16V SIL II
D250 1S1885A
L254
L253
5A FUSE FR251
14.0
J251
BATT
GND
10A FUSE

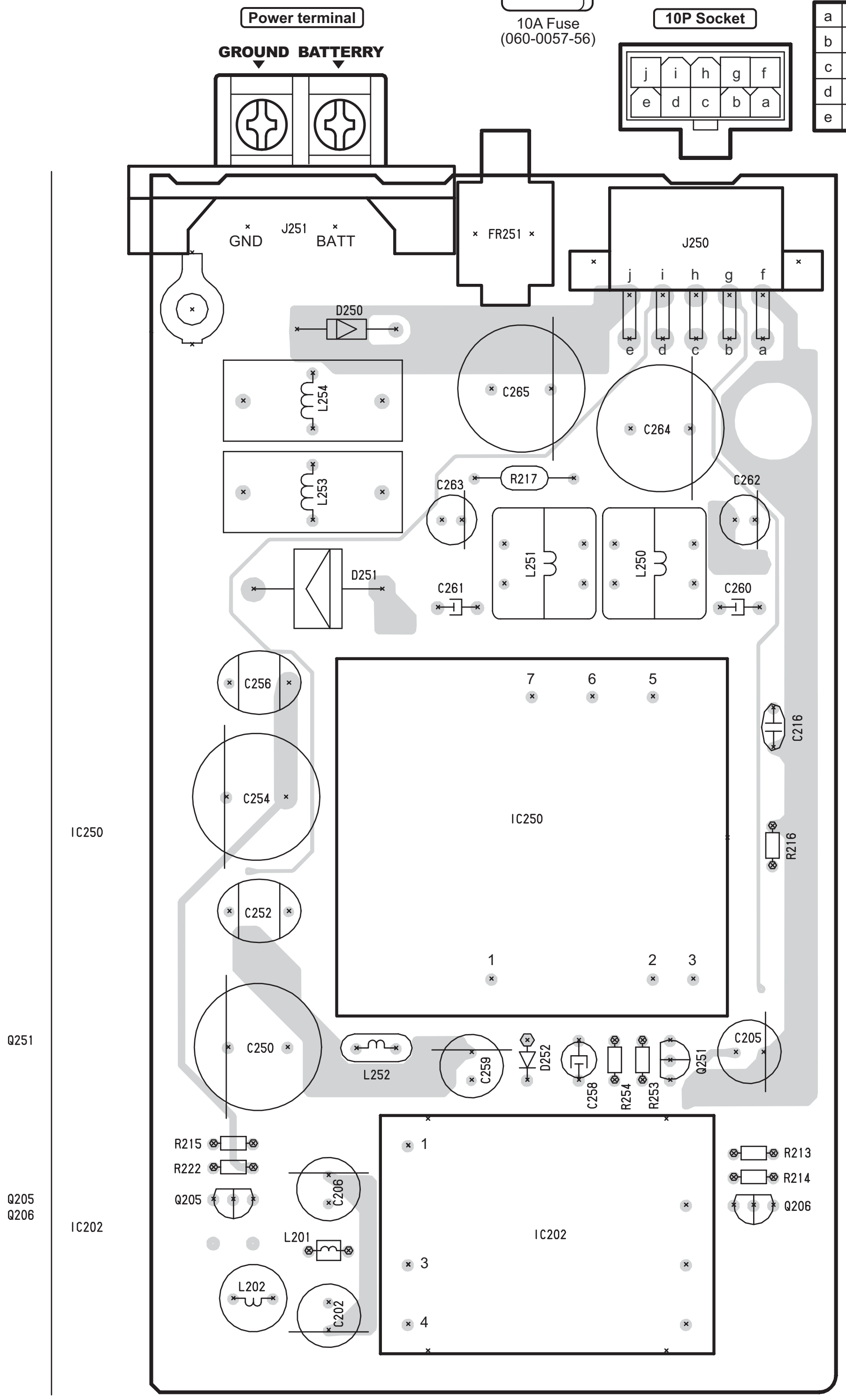
PRINTED WIRING BOARD

DC/DC PWB(B3) section



Ground lead
(854-6424-01)
GND (BLK)
*1.5m
BATT (YEL)
*3.5m
Back up lead
(854-6423-01)
10A Fuse
(060-0057-56)

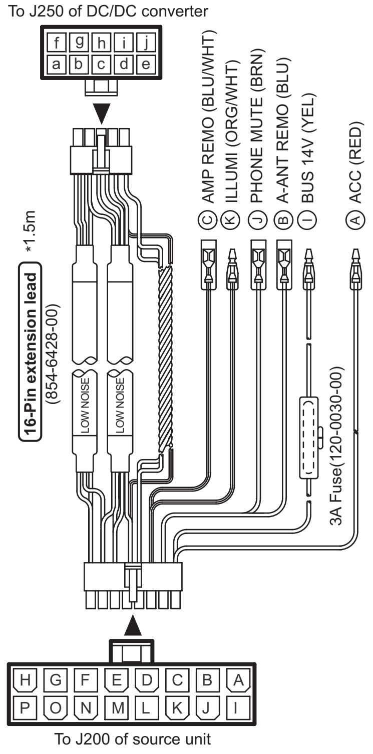
a	VFD +B	f	VFD GND
b	DD -15V	g	VFD REMO
c	DD GND	h	DD GND
d	DD +15V	i	DD REMO
e	B/U 14V	j	GND



Power terminal
GROUND BATTERRY
10P Socket
j i h g f
e d c b a
GND J251 BATT
FR251
J250
j i h g f
e d c b a
D250
L254
L253
C265
C264
C263
R217
C262
D251
L251
L250
C261
C260
C256
C254
C252
C250
C216
R216
IC250
7 6 5
1 2 3
L252
C259
D252
C258
R254
R253
Q251
C205
R215
R222
Q205
C206
L201
L202
C202
IC202
1 3 4
R213
R214
Q206
IC250
Q251
Q205
Q206
IC202

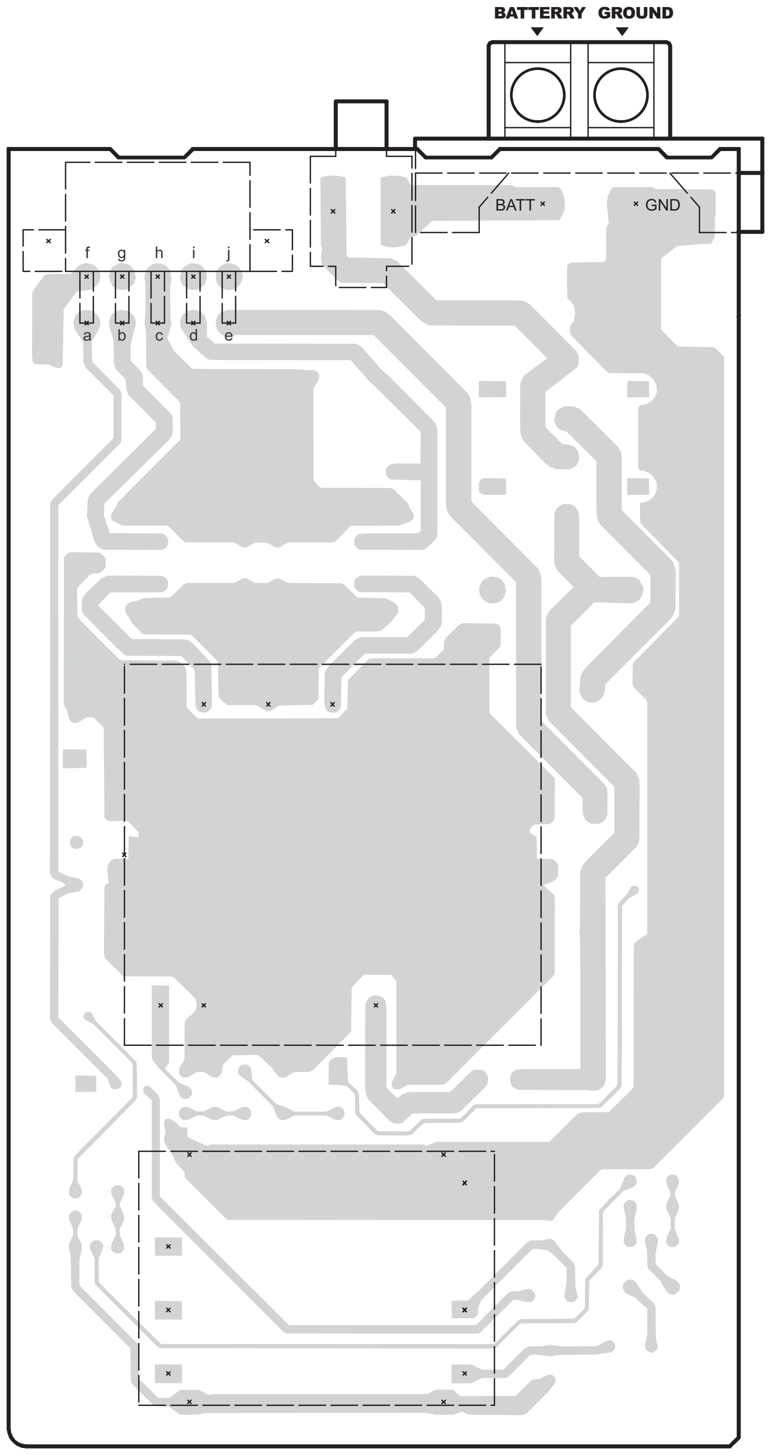
DC/DC PWB(B3)

COMPONENT SIDE



To J250 of DC/DC converter
f g h i j
a b c d e
*1.5m
16-Pin extension lead
(854-6428-00)
LOW NOISE
LOW NOISE
Ⓒ AMP REMO (BLU/WHT)
Ⓚ ILLUMI (ORG/WHT)
Ⓙ PHONE MUTE (BRN)
Ⓑ A-ANT REMO (BLU)
Ⓘ BUS 14V (YEL)
Ⓐ ACC (RED)
3A Fuse(120-0030-00)
H G F E D C B A
P O N M L K J I
To J200 of source unit

A	-	ACC	RED
B	-	A-ANT REMO	BLU
C	-	AMP REMO	BLU/WHT
D	e	B/U 14V	YEL/RED
E	d	DD +15V	RED
F	c	DD GND	BLK
G	b	DD -15V	WHT
H	a	VFD +B	RED
I	-	BUS 14V	YEL
J	-	PHONE MUTE	BRN
K	-	ILLUMI	ORG/WHT
L	j	GND	BLK/WHT
M	i	DD REMO	YEL/BLK
N	h	DD GND	BLK
O	g	VFD REMO	WHT
P	f	VFD GND	BLK



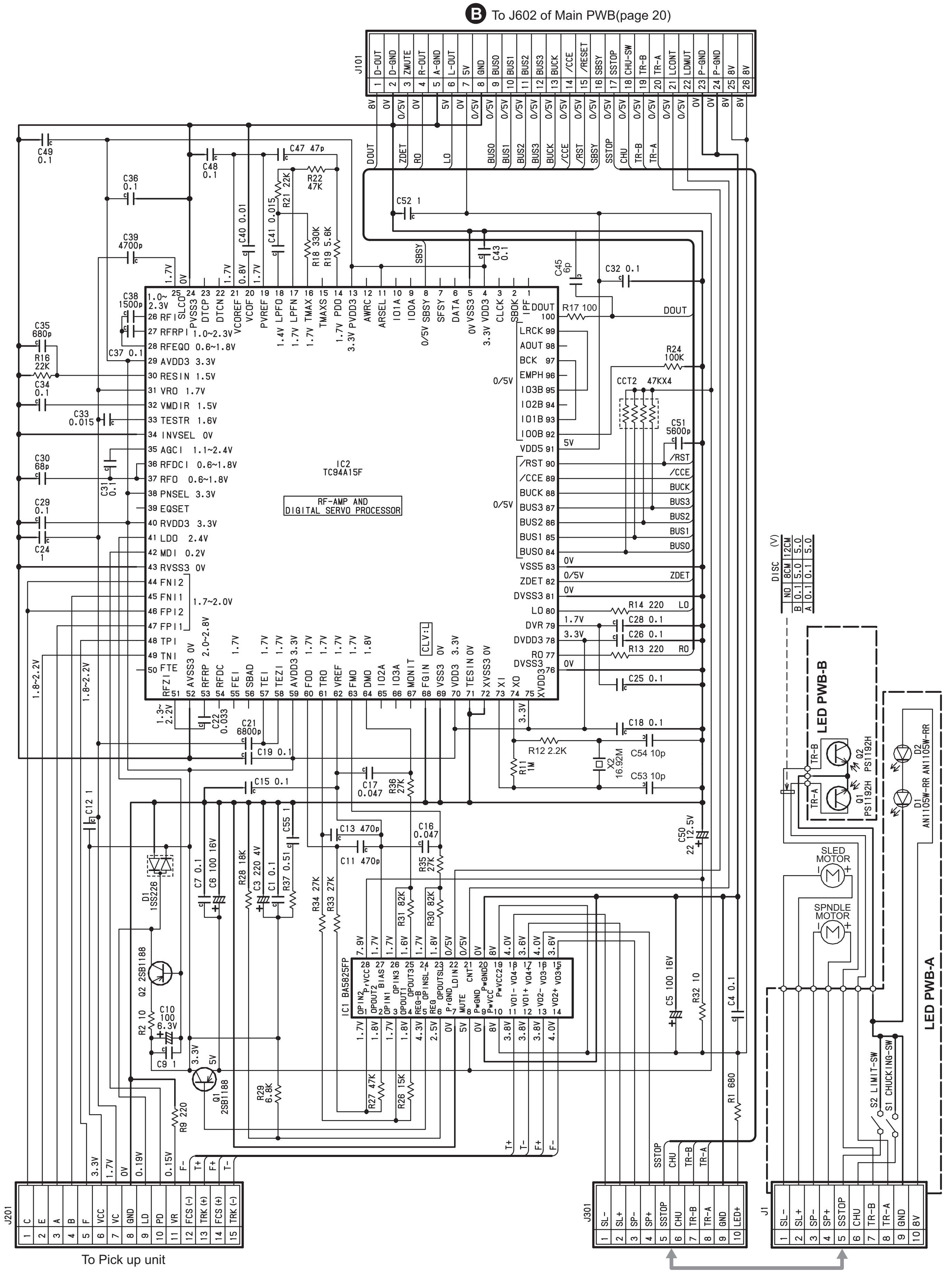
BATTERRY GROUND
BATT
GND
f g h i j
a b c d e

DC/DC PWB(B3)

SOLDER SIDE

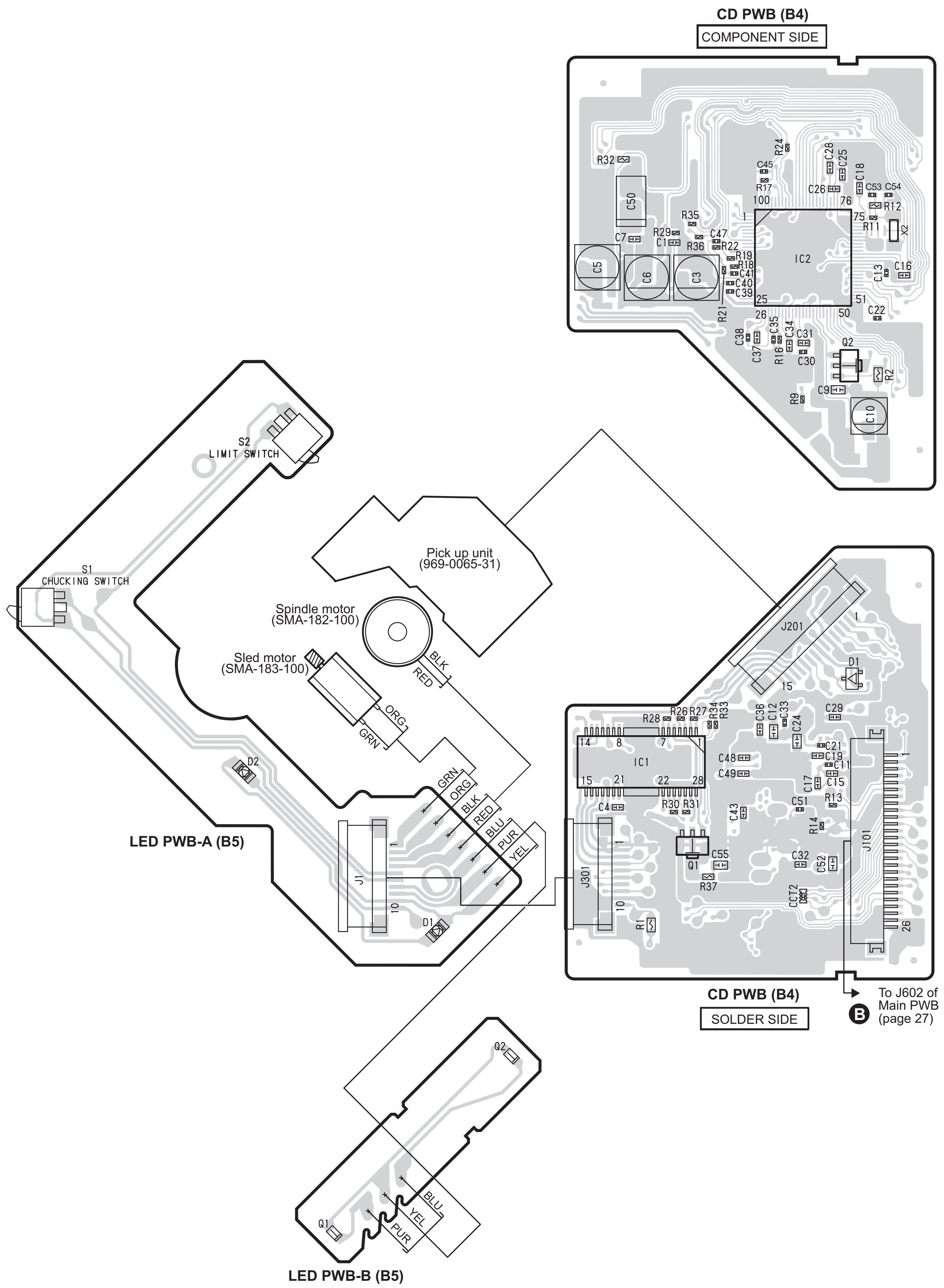
CIRCUIT DIAGRAM

CD PWB(B4), LED PWB(B5) section


B To J602 of Main PWB(page 20)
J101
IC2 TC94A15F
RF-AMP AND DIGITAL SERVO PROCESSOR
IC1 BA5825FP
LED PWB-B
LED PWB-A
SLED MOTOR
SPINDLE MOTOR
S2 LIMIT-SW
S1 CHUCKING-SW
Q1 2SB1188
Q2 2SB1188
D1 1SS226
X2 16.92M
J201
J301
J1
To Pick up unit

PRINTED WIRING BOARD

CD PWB(B4), LED PWB(B5) section


CD PWB (B4)
COMPONENT SIDE
IC2
S2 LIMIT SWITCH
S1 CHUCKING SWITCH
Pick up unit (969-0065-31)
Spindle motor (SMA-182-100)
Sled motor (SMA-183-100)
J201
IC1
J301
J1
J101
LED PWB-A (B5)
CD PWB (B4)
SOLDER SIDE
B To J602 of Main PWB (page 27)
LED PWB-B (B5)